

Visual Novel Game Subtitles and the Improvement of Vocabulary Comprehension Ability: Does It help L2?

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Abstract - The purpose of this study is to test the effect of subtitle features, include the selection of the right words to be used in the vocabulary in the visual novel games (VNG) on L2 English viewers' retention and recall of texts, that used as the teaching material. Quasi experimental research played in this study with consisting of 54 students of Informatics departments, and they were with the same characteristics. It was played the visual novel game into both classes, and administered 45 multiple choice test and questioners in the end of the classes. Both classes went through the same procedures, but one class watched the customized subtitled of the visual novel game. The data gathered were subjected to the statistical procedure of paired sample t-test. And, the result showed that the experimental class showed the better result on their understanding of the story, but there is contrarily on the vocabulary comprehension result, it is found that the both subtitles did not have an effect on participants' vocabulary. This study has implications for English language teachers and material developers to benefit customized bimodal subtitles for better comprehension, retention and recall of aural content in game visual novel via Computer Assisted Language Teaching approach.

Keywords: features, VNG, CVN, subtitles, retention and recall, vocabulary.

Introduction

The development of ICT on some media communication, also followed by the way people say to the world with subtitle. The needs of subtitle are high according to the need of comprehension. Karakas & Saricoban (2012) defined subtitling in videos into three types : (1) Bimodal subtitling which hold English dialogues and English subtitles, (2) Standards subtitling that contains English dialogues and first language subtitles, (3)

Reversed subtitling carrying first language dialogues and English subtitles. Moreover, Silveira & Diaz (2014) completed the theory that reading through subtitles may require more cognitive effort, they can provide a rich, active, and enjoyable experience that contribute to increased attendance. Subtitles position as visual stimuli in videos showcase. The value of lyrics can help nonnative English speakers a lot to understand the lyrics more and make it better connection with the story to enjoy. Karakas & Saricoban (2012) added to complete the theory that although language learners have difficulty in comprehension of video materials in the target language, but they could be equipped with subtitles, either first or target language, in order to facilitate the amount of comprehensibility of the videos or films.

Analysis added to describe further that good subtitles would give the benefit to the readers, Zanon (2006) described there are; (1) their use bridges the gap between reading and listening skills. (2) Students can learn to process text in the foreign language rapidly and improve rapid reading, by trying to keep up with the subtitles that company the dialogues. (3) Students can learn how to pronounce many words, consciously and unconsciously. (4) Subtitles allow learners to follow the plot easily. (5) Learners can develop word recognition skills. (6) Captions can reinforce the understanding of English context-bound expression, and helps learners to acquire new vocabulary and idioms. (7) Students can understand humor, such as jokes, that would be hard to recognize without the help of the captions. Humor can be a difficult, but rewarding subject for the language classroom, and subtitles help to understand it, enhancing the enjoyable character of the activity. (8) Subtitles can enhance students' concentration in following lines. (9) Finally, subtitles can motivate students to study English outside the classroom context, especially by watching TV and cinema, by listening to the original dialogues. Those theorists gave the readers guiding how to use, subtitles to connect them to acquire the story of the film presented also guiding them outside to connect their vocabulary to another story outside.

There are several studies that focused on the benefit of subtitles/captions on comprehension. Those studies purposed to investigate that captioned videos are more effective than non-captioned (Baltova, 1999; Danan, 1992, 2004; Garza 1991; Markham, 1993, 1999; Neuman & Koskinen, 1992; Kusumawati, 2019) Their general findings supported the assumptions that subtitles are the greatest tools in learning vocabulary and improving reading and listening comprehension skills.

The previous visual novel, in this study it called Conventional Visual Novel (CVN) is used in this study as the medium to accommodate in achieving research objectives, combined with other device that is Visual Novel Game (VNG) that would describe further. Conventional Visual Novel (CVN) itself defined as the representing a multimedia game which has all the multimedia's elements like text, backgrounds, characters, music, and sounds to the player (Bashova, 2016). Explained more fully by Cavallaro (2010; 8) that Visual Novel or Conventional Visual Novel (CVN) is a kind of typically articulates it's narrative by means of extensive text conversations complemented by lovingly depicted (and mainly stationary) generic backgrounds and dialogue boxes with character sprites determining the speaker superimposed upon them.

Another device that is a Visual Novel Game (VNG) is the branching of the story, there are some decisions points in the game that the player is expected to make a decision about the next step of the story. Based on the option chose by the player would reach a certain end of the story. And, it also based on how many decision points are in the visual game novel, it increases its alternative story's ends as well as its complexity.

This study, the researcher tried to combine the use of Visual Novel (CVN) and the use of Visual Novel Game (VNG). The only major to differentiate between visual novel and video-game is player interaction. Visual novel commonly does not have any game play, and they do not have any interaction outside continuing the dialogue with a button press or making a decision when the choices is shown up, although the typical game drive of the user do is more. Those two typical medium, there are Visual Novel (CVN) and Visual Novel Game (VNG) are also share mostly the same, there are; music, sound effects, animation and voice acting. They mostly made with game engine, likes Unity or Ren'Py (or Pygame with extra code).

To complete the pictures on the videos of those two devices, this study also see the typographical features used in scenes as the consideration. Weinman (2010) in Kusumawati (2019) said that the typographical features for scenes play an important role to attract the user (the learner) attention curiosity about the story given on

the visual novel. Immersing in the authentic and vivid English context, through the subtitles and lively conversation, students can see the image and hear the pronunciation, use their background knowledge and thus fetch the main ideas (Safranj, 2015).

Typographical features such as size, colors, and positions are paid much intentions, conveying the meaning, and even prioritizing the words in the text to be seen, read and consolidating in mind. Asthiani (2017) described the significance of typographical features of subtitles, transcribed lyrics, in a music video to prove the value of typographic and the effects they could bring about on viewer's mind to read and understand the lyric in the least possible time and recalling later.

This study used natural strategy to apply in the classes, that is the combination between explicit and implicit strategies. The purpose of this strategy is to let the students flow naturally without realizing that they were under investigation of certain research. They may become themselves to enjoy the flow to follow the story on both devices. Smith (2019) said that technique such as webbing that involve students' own perspective in creating interaction that gradually clarify targeted vocabulary may be a way to combine direct teaching and incidental teaching in one exercise. Teachers may have asked to the students' personal experiences to develop their vocabulary, through informal activities, likes semantic association students brainstorm a list of word, pooling their knowledge of pertinent vocabulary as they discuss the less familiar words. Then, semantic mapping goes further, there is grouping the words on the list into categories and arranging them on the visual map, hence, to relationship among the words become purer. Likewise, in semantic developing materials, words are grouped according to certain features, usually with the aid of chats that graphically depicts similarities and differences among features of different words. Subsequently, analogies are a useful way to enhance thoughtful decision about the relationships among meanings in words.

Lee & Chang (2016) in his research said that improving the reading comprehension skills of students has become an important issue in educational and civilian institutes. Further they said that as far as using subtitles in relation to improve the skill of reading is concerned. Scholars agreed that reading is not simply a process of identification of letters, words, and ultimately sentences lead to comprehension built from letter to word to phrase to sentence. Readers need to use their existing background knowledge (schemata) to make predictions about what is coming in the text, about some new, about unfamiliar piece of information relate to what is already known. It presumed that the process of understanding vocabulary, should be

started with reading comprehension first, as the based to know and gain the vocabulary comprehension. Furthermore, students should use their vocabulary in their prior knowledge to relate with the story on the videos as presented materials in the classrooms.

Other studies to strengthen conducted by Lwo & Lin (2012) that the affect of captions on L2 learning of teenagers that it resulted the effect of different captions within multimedia L2 learning in regard to vocabulary acquisition and reading comprehension is dependent upon L2 proficiency of students. Besides, Kruger and Steyn (2013) gave opinion in their research that it was performed in the context of English subtitles on English academic lectures, then it is indicated that there exists a significant positive correlation between comprehension and subtitle in reading, they suggested that using subtitle in reading instruction and L2 learning is favorable.

Bavaharji, alavi, and Letchumanan (2014) explored the effects of viewing captioned videos on EFL learners' content comprehension, vocabulary acquisition, and language proficiency. The results revealed that the effects of watching captioned on the video are stronger on acquiring vocabulary and enhancing language proficiency than on content comprehension. Another supported findings by Faraco & Muntane (2016) and Metruk (2018) that subtitles in the origin language (L1) can be used to retune the link of speech-sounds with perceptive categories, then the intermediate to advanced English learners can adapt to English sounds in a more efficient fashion. Watching authentic English vides represents a powerful and popular tool when it comes to learning languages, and ought to be devoted considerable attention by teachers and researchers. There is no doubt that further research and investigation into the effect of subtitles (both L1 and L2) on reading skills s necessary as it would shed more light on the use of videos and without subtitles in L2 acquisition.

Some scholars believed in their studies that subtitles gave benefit, also powerful the learner to develop their vocabulary comprehension through some bimodal materials in L2 classes. This study try to find the gap between reading comprehension and bimodal materials through visual novel game or visual novel, whether they really support the learners of L2 to develop their vocabulary comprehension

In the line with those theories, there are some questions formulate to conduct this study

1. Is there any influence using Visual Novel Game (VGN) and Conventional Visual Novel (CVN) material on the students reading comprehension?
2. What treatment used to apply during the experiment conduct?

3. Is there any relation to those two materials (Visual Game Novel and Conventional Visual Novel), and the treatments of the teachers applied?

Methods

This study was quantitative with quasi experimental, used pretest and posttest design, and natural strategy applied. The subjects were 2 classes of the fifth semester of Informatics Department, *Politeknik Elektronika Negeri Surabaya* (PENS).

Prior the experiment, both classes were ensured to be equal in all aspects by observing both classroom, interviewing the English teacher taught in both classes, and using the previous semester of students' English scores. Those were carried out as the efforts to reduce the threat towards internal validity, in this case is selection (Ary et al, 2006 : 298). The data of students from the two research classes are shown in table 2.1.

Table 2.1 The Qualitative Features between two classes.

No	Features	Group I (VNG + S)	Group II (CVN – S)
1	Number of students	27	29
2	Mean scores for English subject	50.09	50.55
3	The schedule of English subject	Monday 1-2	Monday 7-8

From the qualitative features in those two classes, it could be concluded that they were not significantly in terms of students' number in the portion mean scores for English subject. In other words, both classes were homogenous which play an important role prior to the experimental research. It should be ensured that the subjects of the study in both groups were equal for the purpose of avoiding bias result.

Then, the students score of both groups compared to determine the effect of the treatment instruction on both groups according to their proficiency.

Then, the next was the experimentation in which the instruction was experimented. They were, VGN + S group to the first group (first class), that was the group was treated with visual game novel with subtitle, that is English subtitle which use to guide the students understand the content.

The other is CVN - S group as the second group (second class), that was the group was treated with conventional visual novel without subtitle to guide. The students only activate their knowledge to lead them to understand the content.

After being given the treatments, the posttest

was conducted to the groups. Due to the posttest, the writer would prepare the instruments that was reading comprehension in the form of objective multiple choice test, with paper base test to each student with allotted time to do the test. After finishing the test, the instruments must be collected to find the results.

In the process of teaching and learning, a teaching schedule alternation between the teacher and the researcher was applied in order to minimize the possible threats, particularly in this case is that the teacher plays role on student's motivation. By alternating the schedule of teaching between the teacher and the researcher, the teaching and learning atmosphere were conditioned like the usual classes so that the students would not be suspicious that they were under the research. The discussion on the detailed lesson plan, including teaching strategy, media/materials, and assessment were carried out to the process of the experiments. In order to ensure that the teacher could apply the lesson plan on conventional teaching strategy (natural), there are mix between explicit and implicit instructions in both experimental groups on each meeting, the detailed explanation on the lesson plan were given to the teacher before starting the class. The detailed teaching schedule alternation between the researcher and the English teacher are shown in the table 2.2

Table 2.2 Teaching schedule for the researcher and the English Teacher

Meeting	The 1 st Group (VNG + S)	The 2 nd Group (CVN – S)
1	The English teacher	The researcher
2	The researcher	The English teacher
3	The English teacher	The researcher
4	The researcher	The English teacher
5	The English teacher	The researcher
6	The researcher	The English teacher
7	The English teacher	The researcher
8	The researcher	The English teacher

This swap was based on the consideration that every changes happening in the post-test for experimental groups did not have any relationship with the teacher in the group. In any other words, this is one of the researcher's effort to control the possible extraneous threat which was in the form of experimenter's effect during the treatment process.

Before conducting the treatment, the

English teacher and the researcher discussed all the planning of the teaching and learning activities during the treatment for both experimental groups. All of the lesson plans for 8 meetings for both classes had been set by the researcher. Before implementing the lesson plans, the proposed lesson plans were discussed with the expert in ESP that was aimed at having feedback for the betterment of the lesson plans.

The revised lesson plans then were communicated in detail to the English teacher, so there was no misunderstanding between the researcher and the teacher regarding the implementation of the activities for the two groups. Based on the result of the discussion between the teacher and the researcher, some revisions were made. Some materials to conduct the activities were prepared, prior to the discussion with the English teacher, power point slide show and video were used as the media.

After all the lesson plans and media had been ready for the experimentation process, the English teacher and the researcher set the schedule for the experimentation for the groups. Prior the experimental process, the pretest score was conducted on both experimental classes to know the condition of the classroom and to ensure that both classes were equal in term of language learning achievement.

The final stage of the data collection was administering the post-test. After administering the post-test, the scoring test was carried out. The formula of the scoring was that each correct test item was counted as one point meanwhile the wrong one was counted as zero point. Then, the number of correct items was divided by total number of the items and multiplied by 100 as the maximum score. The score of each student, then, was tabulated in the computer for further analysis.

Procedures

Data Collections

Completing the purpose study, the same topic materials of visual novel was chosen. But the first group used Visual Novel Game, and the other group used Visual Novel (Conventional Visual Novel). This visual novel game was chosen because it is required on the syllabus. One of the syllabi discuss about Engineering Students.

After watching the visual novel game for group I, and visual novel for group II. Both classes received the same questionnaires with aim to elicit the students' feedback regarding the use of visual game novel or visual novel in the class. And, it also to investigate the relationship between movie viewing and students' performance. Both experimental classes were given paper based quiz with vocabulary activities in multiple choice cloze test.

Pre test

Investigating the effects of subtitles on vocabulary comprehension, this study conducted with SPSS 19. The result obtained from the pretest of all the groups as shown on the table data that the mean score of the group I is 50.09, and the mean score of group II is 50.55. The result of the statistics shows that all groups are almost the same regarding their vocabulary knowledge, and there is no significant difference between them.

Post test

After finishing all the process of treatment based on the syllabus, the groups took the posttest. The result gained from the posttest analyzed. The descriptive statistics of the participants' performance in those two groups show that the mean score of group I is 51.48 and the mean score of group II is 38.48.

The mean score of each group and comparison with the mean obtained from the pre-test revealed that both experimental groups have performed better on posttest and the mean of the two groups are significantly raised. Group I showed with the score 51.48, the group with visual novel game and subtitle significantly outperformed better than the other group, that used conventional visual novel without subtitle is lower.

Analysis

There are the results of the analysis based on data generated from research that has been carried out.

1. There is any influence using Visual Novel Game (VNG) and Conventional Visual Novel (CVN) material on the students reading comprehension?

After the process conducting, the posttest was given to the group I, and it lasted for 60 minutes. Then the T-test with independent sample testing is used to find out the answer to the research problem whether any differences or no differences between two groups. Based on the result of the posttest in the group I, and the group II, it was shown that the mean score of the groups were 51.48 and 38.48 respective. It can be concluded that the main score of the I group, that is group treated with visual novel game with subtitle was significantly higher than the group II.

2. Natural strategy that is combining between explicit and implicit strategies applied in both classes

Both classes used the same strategy, that is combining of explicit and implicit strategies, that those strategies commonly used in the class, called natural strategy applied. It used to avoid the bias between two lectures when they played their roles in their classes. With no different strategy, it gave the

impact to the students that they did not realize, they were as the subject to this study. Other reason was that this study used quasi experimental design, that during this study, the researchers did not allow to change the academic schedule of the institution.

3. There any relation to those two materials (Visual Novel Game and Conventional Visual Novel), and the treatments of the teachers applied

Based on the post-test analysis of group I and group II, which were used T-test with independent sample testing.

The posttest analysis of the group I and the group II, which is used T-test with independent sample testing to find out the answer of the result problem, and it revealed that the mean score for the group I is 5.04 and the group II is 4.34. It is revealed that there is no significant different. They do not have any difference. It means that the test results from both groups showed that there was no increase in vocabulary comprehension.

Discussion and Conclusion

According to the statistics numbers resulted, there are two experimental groups, the visual novel game (VNG + S) with subtitle, and the other group was Conventional Visual Novel (CVN - S) without subtitle. They were treated under the same teaching strategy, that was natural teaching strategy, there were mix methods of naturally explicit and implicit strategies. Those would have performed by the lectures incidentally depend on the class needed base on the lectures observed while he or she taught.

Generally, those groups showed eager response on the media treatment through their reading class session. The students get the sense because they got something new on their reading class session, they felt new thing during on the treatments, there were the used of bimodal materials during the treatments. Even though their background was Informatics, but they rarely maximize to use visual novel as their daily play activities. They only used for sometimes when they were free. The reasons why they rarely used it, because Informatics were their daily life. Most of their life spent on Informatics system life. In order to, they would spend their daily with other activities away from Informatics system, such as reading books, comics or news.

Through this bimodal media, students can develop their understanding of vocabulary comprehension through reading activities. Because, the materials of Visual Novel Game with subtitle help has guided them to know better about the meaning of the word or vocabulary. However, this statistical data failed to show that they get a greater impact on vocabulary comprehension.

They appeared enjoy the media treatment and the class interactions during the listening session. Some problems considered to be the cause of the study, they are: (1) The media played only once, without repeating. This condition forced them incidentally work in hurry. Perhaps, with presenting more than once would get better result on the students comprehending, furthermore to their vocabulary achievement. (2) Some students do not activate their knowledge background to solve the problem laid on their posttest, to raise their vocabulary comprehension. They failed to connect and relate the words to another meaning according to the test given. This condition is suspected to be the cause of the students failed to enhance their vocabulary comprehension. Students only understand the story through the visual novel, without gain to develop their vocabulary. They only focused on the visual novel or visual game novel.

(3) The students' vocabulary limitations s suspected

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as the other cause of their failed. They cannot explore their limitations through the questions, because of their terminology limitations. They only follow the instructions from the visual novel, and received the information without tried to dig deeper to find something new. (4) The natural teaching strategy was appropriated strategy to apply in the class. Because it used according to the class needed, mostly applied parenthetically. When class needed explicit instruction, the lectures would apply the appropriate teaching strategy, and otherwise the other strategy, that is implicit instruction, would apply when the class atmosphere needed. Those findings showed that the students' vocabulary comprehension does not have any impact through these bimodal materials and teaching strategy applied. Two groups failed to show their development vocabulary comprehension.