

Multimedia and paper annotations in students' vocabulary acquisition

Ruiz, Andrea S. ✉

Department of Education, Philippines (ruizsevie@gmail.com)

Alcantara, Jessica M.

Dr. Emilio B. Espinosa Memorial State College of Agriculture and Technology, Philippines



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Abstract

The study was focused on identifying the vocabulary acquisition of students using multimedia and paper annotations. Specifically, it sought to answer the following questions: What is vocabulary level of Grade 9 students using multimedia annotations? What is the vocabulary level of Grade 9 students using paper annotation? and Is there a significant difference in the vocabulary levels of Grade 9 students using multimedia annotations and paper annotation? Using quantitative research method, the study identified the vocabulary acquisition of grade 9 students using multimedia annotations. It was conducted at Masbate National Comprehensive High School involving 62 grade 9 students. The researcher designed a fifty item multiple choice of vocabulary to determine the students' vocabulary knowledge at the beginning of the experiment in both groups. The data were statistically analyzed using T-test. The hypothetical question was analyzed and interpreted at 5% level of significance. The results revealed that there were 12 or 38.70% of students who belonged to Upper intermediate; 12 or 38.70 % for intermediate and 7 or 22.58 for elementary level. With the mean difference of 9.87, the study revealed that there is an improvement in students' vocabulary level using multimedia annotations. Furthermore, the research hypothesis was accepted with the T computed value of -5.276 and T- tabular value of 1.697; because the t- tabular value is higher than the computed value. There was an increment of 71% on the students' vocabulary acquisition using paper gloss and 54% on students' vocabulary acquisition using multimedia annotation. The findings led to the conclusion that the students' vocabulary acquisition using paper annotation has achieved higher improvement than the multimedia annotations and both Paper and Multimedia annotation are effective strategies in improving students' vocabulary acquisition based on the result of the study. It is therefore recommended to use the paper annotation and multimedia annotation strategies to all students in all grade levels especially during reading sessions for more conclusive results and introduction of paper annotated materials during LAC sessions to the language teachers to help improve students' vocabulary acquisition.

Keywords: vocabulary acquisition, vocabulary levels, multimedia annotation, paper annotation, students' vocabulary acquisition

Multimedia and paper annotations in students' vocabulary acquisition

1. Introduction

In the world today, the importance of English cannot be denied and ignored since English is the most common language spoken everywhere. With the help of developing technology, English has been playing a major role in many sectors including medicine, engineering and education, which is believed to be the most important arena where English is needed (Kasim, 2008). Numerous researches have proven that the English language proficiency of Filipinos has deteriorated over the years. The decline prompted the government to issue Executive Order 210 which orders the Department of Education to use English as a second language in the elementary and made it the medium of instruction in the high school. Despite all the conducted researches proving the poor or fair English language proficiency of basic education pupils and students, it has still remained to be a problem. Annotations expand the pool of vocabulary for learners since it provides additional information about the text /word. Making what they read easier to comprehend. Learners are provided with details or references that can be of big help in unlocking the meaning of an unfamiliar term.

Words associated with imagery are easier to learn thus making multimedia very efficient in enhancing one's vocabulary. Apart from providing the dictionary the meaning of a word, it is also possible to provide further information connected to that specific vocabulary item. The content of a various terms will further be enhanced through the help of multimedia. Awareness to variety of vocabulary items determines the understanding of a learner to a specific statement in any given situation. With the current situation where learners are exposed to English through various medias that provides data on how to provide reinforcement and improvements to the current vocabulary levels of certain learners which can be applied later in a larger scale.

Stubbs (2002) explains: "words do not have fixed meanings which are recorded, once and for all, in dictionaries. They acquire, or change, meaning according to the social and linguistic context in which are used. Understanding language in use depends on a balance between inference and convention". Word meanings are subjected to change depending on how and when they are used. A wide vocabulary does not only provide the learner with the definition but also the implied meanings of the specific word as well as the words around it, making them come up with a better understanding of a given statement. Vocabulary is a crucial aspect of education. An extensive vocabulary background helps build a foundation for reading acquisition which correlates with greater academic achievement later in life (Cunningham & Stanovich, 1997). In today's classroom setting, vocabulary has been the most sizable and unmanageable component of English using flashcards, group discussions, referring to bilingual and monolingual dictionaries to decipher the meaning of the word or getting the synonyms and antonyms are just few ways to learn vocabulary. However, despite all these efforts there is still a low vocabulary retention among students. And this low retention among students. And this low retention leads to further problems like low reading comprehension level an inability to express thoughts in writing and speaking.

It is one of the most important components of language. The mastery of it may lead to mastery of other competencies. Thus, there is a need to improve the strategies to enhance the vocabulary retention of the students. Nation once said that in order to acquire vocabulary, students are to be challenged and should focus. Recent technological advances affected many areas of our lives. Twenty first century teachers are aware of the ever-changing trends in technology and are in tune of what the future may bring to education. As a result, learning today is mostly achieved through the use of modern technologies and there is no doubt that utilization of multimedia in vocabulary acquisition in a twenty first classroom is a trend. Multimedia refers to computer-based systems using various types of content. It allows teachers to integrate text, graphics, animation, and other media into one package to present comprehensive information for their students to achieve specified course outcomes. Multimedia permits the demonstration of complicated processes in a highly interactive, animated fashion and that instructional material can be interconnected with other related topics in a more natural and intuitive way Crosby & Stelovsky (1995). It

enhances the learner's interaction with the video & audio material. It provides autonomy in the learning process: self-regulated instruction shifts the sense of responsibility from the instructor to the student. Barlett and Strough, (2003).

Computer-Assisted Language Learning and Teaching (CALL and CALT) are now the most accepted trends in the field of teaching vocabulary in foreign language teaching. With the emergence and popularity of Computer-Assisted Language Learning and Teaching (CALL), many English teachers have shifted their focus from teacher-centered or book-centered instruction to students-centered instruction. With respect to the new information technology, language teachers may use computers and internet in teaching (Hu Hai-Peng, Deng Li Jing (2007). Maximum benefit from these resources can only be classroom. Time, effort and resources invested in building up this project. They would be wasted if teachers and learners fail to use these tools and resources in their approaches to vocabulary instruction and learning. O, Malley and Chamot defines learning strategies as "special ways of processing information that enhance comprehension, learning or retention of the information (1995). Deciphering meaning requires enriched meaning requires enriched vocabulary ,for learners to acquire the necessary information needed for them to understand texts, they need to be familiar with vocabulary items.

Masbate National Comprehensive High School has been providing quality education for the past 100 years to the community. It continuously seeks to improve the quality of education offered to every student. This is achieved through developing students for them to become globally competitive. In English as a Second Language classroom teachers in Masbate National Comprehensive High School (MNCHS) ensures that vocabulary acquisition is patterned from applied linguistic which in truth has been neglected by recent development in research. This neglect is all the more striking when learners themselves readily admit that they experience considerable difficulty with vocabulary, and once they have got over the initial stages of acquiring their second language, most learners identify the acquisition of vocabulary as their greatest single source of problems Meara (1980). With these facts, the researcher decided to conduct a study about multimedia and paper annotation in students' vocabulary acquisition. Incorporating multimedia in teaching is not a novel attempt longer. Khiyabani, Ghonsooly, Ghabanchi, (2014) Using multimedia in teaching vocabulary in high school classes was effective in acquisition and learning unknown vocabulary than traditional methods. It had positive effect on retention of vocabulary knowledge. The use of multimedia provided a bridge for deeper understanding.

As such, the researcher decided to conduct this study to come up with a strategy where technology can be utilized in improving students' vocabulary acquisition. The present study aims to identify the students' vocabulary acquisition using multimedia and paper annotations. Specifically, it seeks to answer the following questions:

- What is the vocabulary level of grade 9 students using paper annotations?
- What is the vocabulary level of grade 9 students using multimedia annotations?
- Is there a significant difference in the vocabulary levels of grade 9 students using multimedia and paper annotations?

Significance of Study - The result of the study will be of great benefit to the following:

Masbate City Division - The results of the research are expected to give some theoretical contributions to the schools to develop the quality of education.

Language teachers - The results of the research are useful for teachers especially, English teachers as it will provide information to know his/her students' vocabulary level and it can aid to improve the teacher's teaching strategy.

Secondary students - The results of this study will greatly help the students especially those challenged English learners. It will help them develop their vocabulary skills.

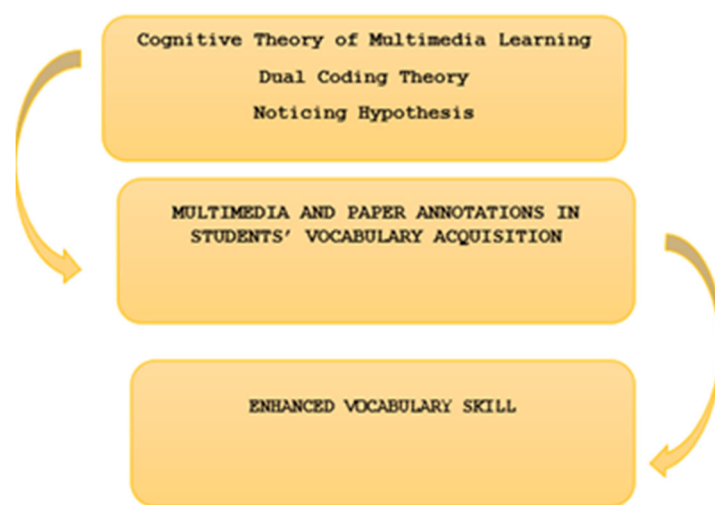
Researchers - This research will be a useful reference for the language research who would plan to make any related study precisely the standard underlying the multimedia annotation in students' vocabulary development.

Scope and Delimitation - The study solely focused on multimedia and paper annotations in students' vocabulary acquisition. Respondents are challenged English learners at Masbate National Comprehensive High School during the first quarter of school year 2018-2019. There were two treatment in this study the multimedia annotation and paper annotation. This study was conducted at Masbate National Comprehensive High School which is situated at Masbate city involving 62 Challenged English learners. No other skill except vocabulary was assessed by the researcher. Also, challenged English learners in other grade level were not included in the study.

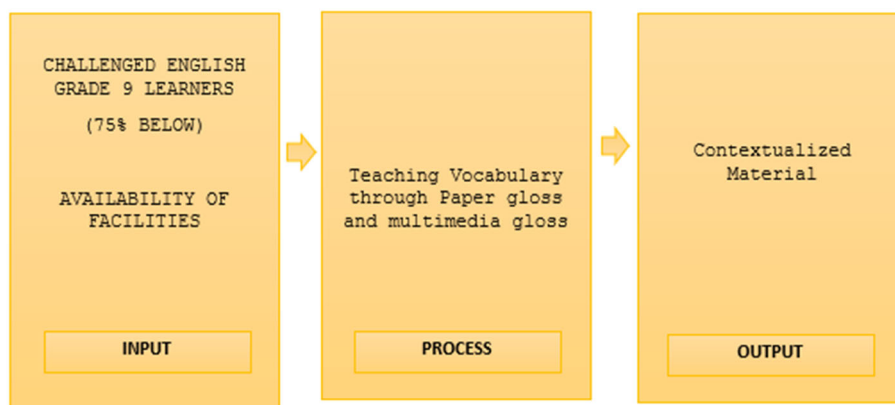
2. Theoretical Framework

In *Cognitive Theory of Multimedia Learning of Mayer* (2003) also known as the "multimedia principle", people learn more deeply from words and pictures than from words alone. Mayer then emphasizes that by simply adding words to picture is not an effective way to achieve multimedia learning. This theory proposes three main assumptions when it comes to learning with multimedia three main assumptions: there are two separate channels (auditory and visual) for processing information; there is a limited channel capacity; and that learning is an active process of filtering, selecting, organizing and integrating information. Mayer's theory presents the idea that the elements (picture and auditory information) and selected and organized dynamically to produce logical mental constructs. Accordingly, in this study the researcher maximized the utilization of picture, text and audio also known as annotation to develop the students' vocabulary level.

Paivio's (1991) *Dual Coding Theory* emphasizes that, two separate symbolic system can facilitate second language learning while they are interconnected and work independently at the same time. Paivio noted that this reinforces the recalling of the processed information and it also facilitates cueing from a system to another system. Double coding the information can work as a complement which gives the learners the opportunity to process the information twice that can result in longer retention of the vocabularies that were newly learned. Accordingly, in this study, the researcher provided the participants with multimedia annotations in order to develop the students' vocabulary levels. Schmidt's (1995) Noticing Hypothesis emphasizes that learners must "notice" critical features in utterances. According to Schmidt "noticing" is the subjective correlate of what psychologists call "attention". Schmidt stressed that intention is necessary in successful learning. Accordingly, in this study the researcher provides various gloss types in order to take the EFL learners' attention to unknown words and facilitate their vocabulary learning.



Paradigm of the Theoretical Framework



Paradigm of the Conceptual Framework

2.1 Definition of Terms

To facilitate better understanding of the study, the following terms are defined operationally.

Advanced Level – refers to the level where the learners show mastery in vocabulary.

Annotations - refers to the texts, pictures and audios used to unlock the meaning of the unfamiliar word.

Beginner Level- refers to the level where the learners are under limited vocabularies and are just starting to acquire the basics.

Challenged English Learners – refers to those learners who have attained a grade of 75 below (did not meet expectations) during the first quarter in English school year 2018-2019

Contextualization- refers to the localization or making use of local products and indigenization making use of cultural practices and festivals.

Elementary Level- refers to the level where learners with wider exposure to materials that can enhance their vocabulary and can already associate pictures and pronunciation.

Intercontextualization (Icon) – means involving two or more disciplines and contextualizing the instructional materials.

Intermediate Level – refers to the level where the learner shows difficulty in many unfamiliar terms, but can decipher the word using context clues and word parts. Learners also profess a considerable though limited knowledge about antonyms and synonyms and their vocabulary.

Multimedia - refers to the use of pictures, sounds, texts and animations.

Multimedia Annotation – refers to the material done in Power point presentation and is presented through a projector or an LED TV. It is composed of pictures, definitions, animations and music.

Paper Annotation – refers to the material made in Microsoft word. It is composed of text (story), phonetic transcription of words, definition and its classification in the parts of speech.

Upper Intermediate Level – refers to the level where the learner shows difficulty in some terminologies such as terms used in specific purposes, but already possesses a vast range of vocabulary and is familiar with the use of synonyms and antonyms depending on the variations of intensity in their usage.

Vocabulary Acquisition – Refers to the process of acquiring new vocabulary words.

3. Review of Literature and Studies

It seems almost impossible to overstate the power of words; they literally have changed and will continue to change the course of the world history. The importance of vocabulary for overall foreign language learning is the basis of studies in vocabulary learning Nation (2001) and Nikolova (2002). Groot (2000) argues that functional L2 reading proficiency requires mastery of a considerably large number of words. Many researchers believe that facing entirely new words is the main obstacle in learning English. But recent years, with the development of new information technology, especially multimedia technology's application in teaching makes it possible to get rid of the negative aspects that come from social, cognitive and material conditions. At the same time, it can improve the students' vocabulary and present a look at using multimedia in teaching English its vocabulary. Ghonsooly and Ghabandi (2014) found out that multimedia is more effective in the acquisition and learning of unknown vocabulary than traditional methods. They also discussed some famous teaching methods and their view on teaching vocabulary and present its look at using multimedia in teaching

English as a foreign language and specifically in teaching its vocabulary. Grammar Translation Method of teaching foreign language is derived from the classical or traditional. It was believed that the method of teaching is still practiced in other countries today. In grammar-translation classes, students learn grammatical rules and then apply those rules by translating sentences between the target language and their native language. This method can help the students more especially that the entrance examinations in universities were written or expressed in English. Another method is Direct method or the Natural method. Its principle is to establish a direct bond between the English word, phrase or idiom and its meaning. The learner the tries to understand the foreign word or expression as it stands, without learning over the native language. There is a focus on every vocabulary. Visual aids are used to teach vocabulary. The teacher teaches vocabulary through pictures, objectives and elaborates pantomime. Concrete words are taught through by grouping words according to the topic or through association of ideas (Zimmerman, 1997).

The cognitive Approach was influenced by cognitive psychology and Chomskyan linguistic Chomsky (1965). Vocabulary teaching and learning is a cycle of semantic learning and internalization, which is closely linked to and to a large extent dependent on the way the word is presented. Silent Way on the other hand is a teaching method created by Caleb Gattegno (1963) that makes extensive use of silence as a teaching technique. Learning vocabulary is facilitated through colorful charts and rods (Cuisenaire rods), colors, numbers, adjectives, verbs, syntax (tense, comparatives, plurals, word order. Even though teachers are often silent, they are still active; they commonly use techniques such as mounting words and using hand gestures to help the students with their pronunciation. The choice of vocabulary is important, with functional and versatile words seen as the best. A silent way teacher introduces words in their written as well as spoken form. It makes it easier for students to retain words. Learners learn vocabs by working on what the words look like, sound like, and how to produce them in their own hand writing. Communicative language teaching (CLT) which is an approach to the teaching of second and foreign languages emphasizes interaction as both the means and the ultimate goal of learning a language. The effect of extended use of computers on reading achievement, the effect of computer on reading achievement, the effect of computer instruction on reading rate and reading comprehension and vocabulary acquisition, as well as the relationship between vocabulary development and reading comprehension. Khiyabani, Ghonsooly and Ghabanchi (2014).

Vocabulary is an important part of a language as well as the basis of linguistic abilities. The size of vocabulary is an important standard to evaluate a learner's English level. Without adequate vocabulary knowledge a second language learner's conversational fluency and reading comprehension will meet difficulties. Vocabulary is the foundation of a language (Peng & Jing 2007). In language learning and teaching, vocabulary has always been a neglect and a weak point. Meara (1982), mentioned that vocabulary received short shift from applied linguistic. Ellis (1994) expressed the view that situation had not changed significantly. Unfortunately, students sometimes do not use context clues properly because of poor vocabulary knowledge and low vocabulary capacity. Moreover, in Parry (1993) study found, a single context hardly gives enough information for an L2 reader to guess the full

meaning of a word. In a word, a certain amount of vocabulary capacity is the necessity in second in second or foreign language acquisition. Learning Memorizing and application of vocabulary runs through the whole process of language learning for students.

The emergence and popularity of Computer – Assisted Language and Teaching (CALL and CALT) greatly affect the teacher's focus from teacher centered or book centered instruction to students-centered or classroom – based instruction. The use of communicative strategies seems to suggest that the way of learning vocabulary does not merely involve memorizing and monotonous practicing, but various other activities to enhance understanding and usage. There were several new features frequently used in CALL and CALT, including hypertext, hypermedia and multimedia. Multimedia refers to many of the same ideas associated with hypermedia, but hypermedia might only use of two types of media (e.g. text +sound r text + photographs). Multimedia tends to feature several media types including text, images, sound, video and or animations. Hoogeveen (1995) concluded several good points by using multimedia in language learning. Firstly, learners respond to multimedia in a complex way and give the feeling of experiencing information instead of simply acquiring it. Secondly, the man-machine is more friendly interaction. Thirdly, students feel more fun from multimedia and learning becomes a happy process.

According to Gagne's (1988) information processing model, learning is a series process of cognition, which several scale can change the outside stimuli into a new ability. Learners receive the outside stimuli from the reception of eyes, mouth, ears, nose, and hands and change stimuli into physical neural information, which will be in storage of sensory register. Application of multimedia technology in English teaching supplies various video, picture and literal material for students, they can use both the auditory and visual channels. It is similar to the natural ways to obtain information (Peng & Jing, 2007). Few years from now, it can be assumed that access to information and communication technologies (ICTs) will continue to improve with the increased availability of IT services and certainly all schools will use this technology in their classes in teaching different courses and of course in teaching English as foreign language (Khiyabani, Ghonsooly, & Ghabanchi, 2014).

Yuksel and Tanriverdi (2009), examined the effects of watching a closed captioned movie clip on incidental vocabulary learning. Using captions and subtitles to facilitate the comprehension of video materials is taken for granted by many teachers and researchers. Moreover, many educators believe that television programs with captions seem to provide a rich context for foreign language acquisition. It is also argued that viewers are, generally, quite motivated to understand what is shown and said on television when the caption are provided (Danan, 2004). In one of the first experimental studies on this topic, Garza (1991) examined the effects of captions in a study of adult language learners who were studying English as a second language (ESL) and native English learners of Russian. Based on the findings of his study, Garza argued that caption had a significant effect on reading/listening comprehension and vocabulary learning. Similarly, Huang and Eskey's (2000) study investigated the effects of closed-captioned TV(CCTV) on the listening comprehension of intermediate ESL learners. Their study revealed that captions improved not only the listening comprehension skills of college-level ESL students but also their general comprehension and vocabulary development. Another study was conducted by Koolstra and Beentjes (1999) which investigated the level of improvement in reading vocabulary knowledge by watching Dutch – subtitled English language television programs at home.

In the field of second language acquisition (SLA), “comprehensible input” (Krashen, 1985) has been considered a critical factor to help learners acquire foreign and second languages (L2). From this perspective, the notion of extensive or free voluntary reading (Day & Bamford, 1998; Krashen, 1993) has emerged that L2 learners should be given more pleasure reading by minimizing a burden look-up behavior. At the same time, technology innovation has made it possible for extensive reading to occur through technology over the past decades. In particular with hypertext glosses or multimedia annotations, a number of studies have indicated that hypertext glossed input is comprehensible input and has made it possible for L2 readers to benefit all from extensive reading. Yun ,2011 examined the effects of hypertext gloss use on L2 vocabulary acquisition in computerized reading contexts, and which specific combination of either text-only(single) or text + visual (multiple) hypertext glosses is more effective on L2 vocabulary acquisition and what potential. Also, it aims to synthesize characteristics of

studies, technology use and research methods from empirical research studies for a comprehensible and insightful review of the effect of hypertext glosses on L2 vocabulary acquisition.

Meta-analysis as a quantitative method was conducted to synthesize overall findings of empirical studies by calculating a standardized mean difference effect size. Result revealed that various L2 learners, including English as a second or foreign languages (ESI/EFL), Spanish as a foreign language (GFL), benefit from multiple hypertext glosses while reading computerized texts. In terms of research design, hypertext gloss studies have been almost always conducted in setting of class session-based quasi-experiment design with a research develop program at a university or college level. Azari and Giahpoor (2016) also investigated the efficacy of multimedia glosses on vocabulary development of intermediate EFL learners. Participants in this study were students in grade two in Farzanegan High School in district 11, Tehran. All respondents were in the same age and gender. Two different types were used: multimedia glosses for experimental group and paper glosses for control group. The researcher provided students in experimental group reading an expository English text with multimedia education year 1993-1994. A pretest and posttest were administered. Finding suggest that multimedia glosses are more effective than paper glosses in learning vocabulary. The results showed that students in the experimental group outperformed the students in control group. It is suggested to the English teachers to use multimedia glosses can help teachers to save time and energy in the class.

Regarding the new technologies in the 21st century, it is time to look for new ways of teaching vocabulary knowledge. Vocabulary learning strategies are the tools utilized in the task of learning vocabulary in the target language. They can be employed in all kinds of tasks. In a study made by Dr. Afsha Jamal (2014) entitled *Vocabulary Learning Theories- A keen Perspective*, he mentioned and included different ideas such as the behavioral –psychological and philosophical foundations of the structural method which yield to the cognitive claims of Chomsky for language a “mental organ: in retrospect, the structural approach as practiced in the classroom led to a fragmentation and trivialization of thought by breaking up language in two ways: into structures and into skills. The form focused teaching of language aggravated the gap between the learner’s linguistic age” and “mental age”. Communicative competence was also mentioned in this study. It was said that the attempt to achieve communicative competence assumes the availability of a grammatical competence to build on, and indeed the communicative method succeeds best in the initial stage, introducing variety and learner involvement acquired through exposure.

Hedge (2000) also points out that linguistic studies focus on how vocabulary is learned. This study relates to the present study as it deals with the different strategy of teaching vocabulary. Learning a second language study as it deals with the different strategy of teaching vocabulary. Learning a second language means learning its vocabulary. Khyabanim Ghonsooly and Ghabandi (2013) tried to observe the impact of using multimedia on teaching vocabulary to see if it could improve learning vocabulary in high school classes. There were 26 participants who were divided into two groups, the controlled group and the experimental group. Learners who were in controlled group were taught in a traditional way multimedia technique. Multimedia instrument is composing of picture, audio, video and animation, power point, text, taking program such as Google talk, different kinds of flashcards, wallpaper and games. It was found out that there is a statistically significant difference between controlled group and experimental group with regard to the second delayed posttest. Findings also suggest that multimedia is more effective in the acquisition and learning of unknown vocabulary than traditional methods.

The present study has the same age bracket of the multimedia. There were 26 participants who were divided into two groups, the controlled group and the experimental group. Learners who were in controlled group were taught in a traditional way multimedia technique. Multimedia instrument is composing of picture, audio, video and animation, power point, text, taking program such as Google talk, different kinds of flashcards, wallpaper and games. It was found out that there is a statistically significant difference between controlled group and experimental group with regard to the second delayed posttest. Findings also suggest that multimedia is more effective in the acquisition and learning of unknown vocabulary than traditional methods. A key issue in L2 vocabulary acquisition is whether or not learning would be improved if information about an individual lexical

item were to be presented simultaneously via multiple modes (Seghayer,2001). There were 30 ESL participants which was grouped according to their native language. Within-Subject design was employed in the design. All participants were exposed in one treatment conditions and were assessed on the dependent variable after they participated in the treatment. Participants were chosen based on the performance on the reading section of the institution's placement test. There were three instruments employed in this study: Questionnaire, Vocabulary test and Interview to come up with the following findings. The result was consistent with the conclusion proposed by the Dual Coding theory (1986) all words with text and video annotations were remembered better than words.

A key issue in L2 vocabulary acquisition is whether or not learning would be improved if information about an individual lexical item were to be presented simultaneously via multiple modes (Seghayer, 2001). There were 30 ESL participants which was grouped according to their native language. Within-Subject design was employed in the design. All participants were exposed in one treatment conditions and were assessed on the dependent variable after they participated in the treatment. Participants were chosen based on the performance on the reading section of the institution's placement test. There were three instrument employed in this study: Questionnaire, Vocabulary test and Interview to come up with the following findings. The result was consistent with the conclusion proposed by the Dual Coding theory (1986) all words with text and video annotations were remembered better than words. Yun 2011, examines the effects of hypertext gloss use on L2 vocabulary acquisition in computerized reading contexts, and which specific combination of either text only (single) or text + visual(multiple) hypertext glosses is more effective on L2 vocabulary acquisition and What potential moderators to systematically account for between study variation are. It also aims to synthesize characteristics of, technology use and research method from empirical research studies for a comprehensible and insightful review of the effect of hypertext glosses on L2 vocabulary. The results revealed that various L2 learners, including English as a second or foreign languages (ESL/EFL), Spanish as a foreign language (GFL), benefit from multiple hypertext glosses while reading computerized texts. In terms of research design, hypertext gloss studies have been almost always conducted in setting of class session-based quasi-experiment design with a researcher-develop program at a university or college level. Both study made use of glosses however the present study is an experimental study. It will also focus in one language which is English. Japanese, Spanish and German will not be included.

On the other hand, Poole R, 2011 assessed the effectiveness of a concordance-based and a dictionary-based gloss for facilitating semantization and increasing productive knowledge of academic vocabulary. The study reveals the usefulness of a concordance based glossing modality as the concordance based treatment group displayed gains in semantization and in productive knowledge. Students' attitude towards the concordance annotations. Learners are increasingly technologically savvy and are likely to reject input they perceive to not be salient and beneficial to a task and to learning. An easy-to-access, ready-made concordance based gloss modality may efficiently and effectively help language learners semantize and untimely acquire productive knowledge of academic vocabulary. Students' interest in multimedia/technology greatly affects the acquisition of the students. Hence, the current study utilized the multimedia as one of its instrument.

Yu (2010) reviews the role of multimedia vocabulary annotation (MVA) in facilitating second language L2 reading and listening activities. It examines the multimedia learning and multimedia language learning theories that underlie the MVA research, synthesizes the findings on MVA in the last decade, and identifies three under-researched areas on the subject. There were two multimedia learning annotation theories examined. First was Dual Coding Theory of Paivio this theory hypothesize that memory and cognition are served by two separate systems: one specialized in dealing with verbal information such as words and symbols and the other with nonverbal information such as pictures or objects. In the learning process, the human mind creates separate verbal and visual mental representations (encoding) for incoming information using each of the systems. Although the two systems work independently, they are interconnected: representations in one system can activate those in the other.

While cognitive theory of multimedia learning of Mayer, the most influential theory for L2 learning via multimedia in the past 10 years because it has been referred to as a theoretical basis by many MVA studies. The theory takes a step beyond dual-coding theory in that it models the detailed learning process in a multimedia

environment. According to the theory, such a process contains three subcomponents: (a) selecting relevant verbal and visual information from the multimodal input, (b) organizing the selected information into the verbal and visual mental representations, and (c) integrating the resulting verbal and visual representations with each other. Learning is therefore more likely to occur when learners can build meaningful connections between the verbal and visual mental representations. These theories were utilized as theoretical framework of the present study.

Good (2009) Examines the effect of 3 kinds of glosses-first language(L1) Chinese glosses plus second language (L2) English example sentences, L1 in test glosses, and L1 marginal glosses – in comparison with a no gloss condition in reading an English passage, to explore whether providing glosses can facilitate reading comprehension and vocabulary acquisition. Unlike this study, current researcher will be using with one language only which is English. Comparison will be on the result of pretest and posttest of the group who was treated with paper gloss and the group who was treated with multimedia gloss. Another investigation was done by Yanguas (2009) his study, Multimedia Glosses and their Effect on L2 Text Comprehension and Vocabulary Learning whether any of the conditions promoted noticing and whether this noticing and whether this noticing led to better comprehension of the text learning of the target vocabulary words. Reading comprehension, recognition, and production measures were utilized in a pre-post test design. There were originally consisted of nine sections of fourth semester college-level Spanish, a total of 133 participants. A final pool of 94 participants were eliminated for the following reasons: 1.) scoring more than 6 out of 21 on the pretests (a chance score;4 participants)2.) indicating outside exposure during the study on the debriefing questionnaire (administered at the end of the study;3 participants);3.) failing to produce intelligible think aloud protocols(8 participants),4.) failing to attend all sessions(9 participants);and 5.) failing to record answer(15 participants).Participants were randomly assigned to one of the four gloss groups. Control N=23; picture & text gloss, N=25; picture gloss, N=26 text gloss, N=20. Results of quantitative and qualitative analyses of the data gathered showed first that all multimedia gloss groups noticed and recognized significantly more of the target words than the control group. No significant differences were found among any of the groups in production of target vocabulary items. Regarding comprehension, results showed that the combination gloss group significantly outperformed all other groups. These results confirm that the multimedia glosses under investigation have a different effect on comprehension and vocabulary learning respectively.

The present study aims to know the vocabulary development through the use of multimedia annotation in teaching vocabulary. It will only have two groups which are paper gloss and multimedia gloss. In one of the studies conducted by Nemati (2009) attempted to compare the impacts of teaching through memory strategies on experimental group comparison to control group, where students were taught the meaning new vocabulary items through giving synonyms and mini contexts. Results of this study reiterate the long-term effectiveness of teaching through memory strategies and giving awareness to the students because in spite of the importance of memory strategies students rarely use these strategies especially that only 4% of the brain is actively utilized during traditional language teaching. This implied that, teaching memory strategies was successful both in storing and retrieving. It was also clear that the experimental group outperformed control group in immediate test which showed better retrieval. The use of computers in language learning is a phenomenon that has taken the Applied Linguistics field by storm and the application of computers in language learning tasks is becoming more and more common.

Lage (2008) made an exploratory study investigating the difference in the incidental vocabulary learning (or recall) of Spanish vocabulary while reading for comprehension. A second area of investigation is the influence of learners' characteristics on gloss access. High-intermediate/low-advanced Spanish students from two sections of the same Spanish course at an American university participated in this study. One group of participants was provided traditional English marginal glosses to the left of the reading while the second group of students was provided with computer-assisted language learning (CALL) glosses. The participants took three constructed response vocabulary post-tests in the following three weeks and a constructed response reading comprehension test upon completion of the reading task. The results were ultimately inconclusive, but indicated there was no significant difference between word recall and gloss presentation, and that gloss access is to some extent positively

related to language proficiency. The current study aims to know the vocabulary development of grade 9 students of MNCHS both studies made use of different glosses. However, Lage's study explains CALL glosses and traditional glosses on incidental vocabulary learning and Spanish literature reading comprehension.

It was found out in the study of Kost, Foss and Lenzini, Jr. (2008) that the hypothesis that subjects utilizing a combination of text and pictures in the gloss would outperform subjects under the two gloss conditions on the recognition of target words on both short-term memory retention. This investigation was about the effects of pictorial and textual glosses and a combination thereof on incidental vocabulary growth of foreign language learners. Its respondents who were enrolled in a German classes were asked to read a narrative test passage under one of the three marginal gloss conditions: textual gloss; pictorial gloss; text and pictorial gloss. Loucky (2007) mentioned in his study the eight essential steps of vocabulary learning and these are (1) assessing degree of word knowledge; (2) accessing new word meanings; (3) archiving new information for study; (4) analyzing word parts and origins; (5) anchoring new words in short-term memory; (6) associating words in related groups for long-term retention; (7) activating words through productive written or oral use; and (8) reviewing /recycling and retesting them. She also had a survey about the purchase, use, and preferences regarding electronic dictionaries were used to analyze and compare the types of dictionaries being used by Japanese college students in three college engineering classes. Words which were not fully understood should be re-met through planned re encounters, retelling and activities that encourage learners to repeat the vocabulary learning cycle again so that relearning and reactivation can take place. Glosses or annotation serves as a dictionary similar to the current study, glosses will serve as a dictionary to the respondents where they can look up into for better comprehension.

The size of vocabulary is an important standard to evaluate a learner's English level. Without adequate vocabulary knowledge a second language learner's conversational fluency and reading comprehension will meet difficulties (Peng & Jing, 2007). It is very evident that computers and internet promoted a student-centered way of learning. With this, many universities provide their non-English major college students with language labs and multimedia facilities. The use of communicative strategies seems to suggest that the way of learning vocabulary does not merely involve memorizing and monotonous practicing but various other activities to enhance understanding and usage. Chinese English Learners frequently use memorizing in learning vocabulary. However, Nan Chao, 2005 suggests that multimedia technology in English learning and teaching can help students improve the results of memorizing words. Both studies believe that Effective Language instruction should be of multisensory training in nature. Multimedia environment makes it possible for students to acquire vocabulary from sounds, font/spelling and meaning of one particular word. Learning Vocabulary through Context was quite complicated since the learner must learn additional linguistic, semantic, syntactic and collocation features compared to Learning Vocabulary through games. Most learners may feel frustrated and boring when reciting vocabulary. Interest is the best teacher. Riddle, jokes, puns, tongue twisters and crosswords are some of the games for vocabulary. This paper finds out that still, there are limitations for vocabulary acquisitions under multimedia environment.

Demand for excellent software and courseware and teachers who are familiar with the relevant technology and are confident about the future of multimedia teaching and learning. The current study on the other hand, maximized the use of multimedia environment with the use of Laptop, Speakers and LED TV. Digital skills of teachers will also be measured in the current study to ensure that the strategy will be fully maximize. Akbulut (2007) also studied the effects of multimedia annotations on incidental vocabulary learning and reading comprehension of advanced learners of English as a foreign language. Results showed that the groups that had access to definitions along with both types of visuals had significantly higher vocabulary scores on both immediate and delayed post-test than the definition only group. However, no differences were observed on the reading comprehension test. Finally, the qualitative data revealed that hypermedia reading had positive impact on participants' attitude towards foreign language reading and vocabulary learning. The researcher also utilize the use of annotations. There were three types in this study which are definitions of words, definitions coupled with associated pictures and definitions coupled with associated short videos. The current study will also be using annotations one of which is multimedia which is similar to the instrument used in this study and the other one is

paper gloss.

The effectiveness of L1 and L2 glosses on incidental vocabulary learning in a multimedia environment was examined by Yoshii (2006) his investigation included the effects of additional pictorial cues in L1 and L2 glosses, and how these additional affect vocabulary learning. A total of 195 students from two universities in Japan participated in the study. The study employed a mixed design repeated measures 2(languages) X 2 (pictures) X2 (tests) analysis of variance ANOVA. The result also revealed significant interaction effects between languages and tests indicating that L1 and L2 groups showed different patterns of vocabulary retention over time. Findings suggest that both L1 and L2 glosses are effective for incidental vocabulary learning, but long-term retention may differ between the two types; and that effect of additional visual cues on vocabulary learning may rely on the nature of the tasks given. The present study will focus on the efficacy of multimedia of annotation in students' vocabulary level. Lomicka (1998) investigated the effects of multimedia reading software on reading comprehension. Specifically, the study aimed to explore how multimedia annotations influence the level of comprehension. Twelve college students enrolled in French course were exposed to a reading text in a computer screen and were asked to think aloud while reading. Participants read the text under one of the three conditions: full glossing, limited glossing or no glossing. The amount and type of glosses, length and time that each participant consulted was tracked. The current study also aims to explore the multimedia annotations/glosses however, it will focus in vocabulary development of the students and it will only use two types of treatment the paper gloss and multimedia gloss.

Ko (2005) Using both qualitative and quantitative measures, investigates how different types of gloss conditions affect Korean college students' reading comprehension. Ko (2005) also made mention the 4 advantages result from glossing first, glosses can help reader understand new words more accurately by preventing incorrect guessing; glossing can minimize interruption while reading is in process; glossing may help readers build a bridge between prior knowledge or experience and new information in the text; glosses can make students less dependent on their teachers, allowing for greater autonomy. Both study focuses on how different glosses affect the students' comprehension however it differs in terms of focus since the sole focus of this study is the reading comprehension of its Korean respondents while the sole focus of the current study is the vocabulary development of G9 students of Masbate National Comprehensive High School. In Larsen-Freemans' book entitled *Techniques and Principles in Language teaching* made mention about the Audio-Lingual method in teaching language published in 2000. Audio- Lingual Approach was dominant in the United States during the 1940s, 1950s and 1960s is known to be a major paradigm shift in foreign language teaching. The objective of the audio-lingual method is accurately in speech situations and knowledge of sufficient vocabulary to use with grammar patterns. The students are mastering the sound system and grammatical patterns.

Vocabulary is limited and learned in context. New vocabulary and structural patterns are presented through dialogues. This approach is similar to the aim of the current study as it aims to maximize the audio and lingual in teaching vocabulary. However, the current study included text and pictures to promote better understanding and alleviate the retention level to the students. The advent of electronic dictionaries has raised the inevitable question whether electronic dictionaries have a similar effect to that of paper dictionaries and glosses and what types of electronic glossing techniques will produce the best results in vocabulary learning. Most studies, however, compared the effect of different type of glosses paper, electronic textual electronic pictorial, electronic and video) on reading comprehension, translation, on the number of words looked up by the learners, the length of time on task and the effect of gloss type on the reported satisfaction of dictionary users. Electronic gloss superior to a paper gloss for acquiring new vocabulary because of the following reason may have to do with the visual produced by a word which embedded in a window and appears in a prominent position on the computer screen Laufer (2000).

Research on second language vocabulary has revealed that words associated with actual objects or imagery techniques are learned more easily than those without. Chun and Plass (1996) studied the effect on Multimedia Annotations on Vocabulary Acquisition, which presented in the paper the summary of two (2) previous research on L2 vocabulary acquisition it utilized the visual. According to Chun and Plass, Second Language Learners

remember images better than words, hence the Second Language Learners remember words better if they are associated with images. There were 160 respondents who undergo brief introduction to the CyberBuch program. They watched a video preview that gave an overview of a German short story they read the story and looked up the meaning of individual words by freely selecting any of the different types of annotations available. Respondents took a vocabulary test upon completing the reading then finally they wrote a recall protocol. Results revealed that vocabulary words were remember with 24.1-26.5%, Words with pictures, definitions were recalled significantly better in the delayed tests that in the test immediately after reading, where words with only text definitions showed no difference between intermediate and delayed tests and words with video and definitions were recalled less in the delayed tests than immediately after reading.

4. Materials and Methods

Materials - The researcher made use of the LED TV, laptop, test paper, internet, and speaker in conducting the study. Since this study was focused in the vocabulary acquisition of those students who underwent the multimedia annotation treatment, multimedia was maximized as well.

Research Design - The present study used quantitative design as it collect and analyze the obtained results of pretest and posttest which will be conducted before and after the experiment to controlled group and experimental group. Also, this study involves the use of computational statistic specifically T-test to drive results. It was conclusive in its purpose as it tries to quantify the acquisition of students' vocabulary through using multimedia and paper annotations.

Sample and Sampling Technique - Purposive sampling was used in this study. It is a technique in which respondents were chosen base on characteristics of a population and the objectives of the study. In this case, the respondents were chosen according to their grades during the 1st quarter in English School Year 2018-2019.

Respondents - The respondents of the study were the challenged English learners during the first quarter of Masbate National Comprehensive High School. Science, Technology, Engineering and Mathematics students were excluded since they are expected to be well performing students. Challenged English learners are those who got 75 below (did not meet expectation base from DepEd Order no. 8 s. 2017) in English during the first quarter. There were 62 grade 9 students from Masbate National Comprehensive High School 30 of which were boys and 32 were girls. These group of students were divided into two groups: the controlled group and experimental group.

Instrumentation - The researcher designed a fifty-item multiple choice of vocabulary to determine the students' vocabulary knowledge at the beginning and the end of the experiment in both groups. The treatment was used to improve the vocabulary knowledge of students in experimental group by exposing to multimedia annotation in teaching vocabulary. There are four (4) short stories with unfamiliar words. Paper glosses includes the Phonetic transcription of the unfamiliar words, part of speech and the definition. While Multimedia glosses includes definition and picture. Moreover, a post test including 50 multiple choice question of vocabulary with four choices to choose from was used to check out students' vocabulary knowledge at the end of experiment in both groups. The instrument was partly adopted and modified from Arazi and Giahpoor's study entitled *The Effect of Multimedia Glosses on Vocabulary Development*. It was modified since the original instrument is no longer available and non-circulatory. The number of test vocabulary, type of test and the multimedia annotation and paper annotation concept were adopted. However, the vocabulary domains and competencies in curriculum guide for grade 9 from first quarter to fourth quarter were considered in choosing the words from Reader's Digest.

Validation of Instrument - The researchers submitted a copy of her instruments to eight (8) Teacher III, one (1) Master Teacher I and one (1) Master Teacher II of Masbate National Comprehensive High School. The instruments were read thoroughly. Spellings, functions and usage of each word were checked. Some corrections were made after they've read and scrutinized the instruments.

Data Gathering - The researcher used purposive sampling. All respondents undergone the treatment. Sixty-

two respondents were identified by the researcher through their grades. These students got a 75 below grade in English during the first quarter. A letter was sent to Principal's Office to ask for permission to conduct the study. Another letter was sent to the respondents' parents/guardian to ask for their permission to include their children in the study. The researcher designed a 50 item Multiple Choice Question with four (4) choices served as the pretest which was administered on both groups before the treatment. The data gathering and experiment took 6 sessions 2-3 hours per session. The respondents were divided equally into two. The first group underwent the paper gloss treatment where they read 4 short stories with unfamiliar words. Paper glosses include the Phonetic transcription of the unfamiliar words, parts of speech and the definition of terms. While Multimedia annotation includes definition and picture. After the treatment, few questions were asked as to the comprehension of the students about the stories. Lastly, a 50-item multiple choice question with 4 choices served as a post test for both groups. The scoring was adopted from Oxford Online English. There were 5 levels of vocabulary as shown in table 1 The A1 (beginner), A2(elementary), B1(intermediate), B2(upper-intermediate) and C1(advanced). Oxford University press has always been the basis when it comes to English language, specifically in vocabulary. Its famous Oxford English Dictionary (EOD) is the principal historical dictionary of the English language, published by Oxford University Press. For the past 90 years Oxford has been providing a comprehensive resource to scholars and academic researchers as well as describing usage in its many variations throughout the world. Oxford Online English.com on the other hand is a website where everyone can have online classes with the experts. The learners can also test their skills in language in the said website.

The instrument was partly adopted and modified from Arazi and Giahpoor's study entitled The Effect of Multimedia Glosses on Vocabulary Development. It was modified since the original instrument is no longer available and non-circulatory. The number of test vocabulary, the type of test, the multimedia and paper annotation concept were adopted from Azari and Giahpoor's study. The target vocabulary words which were taken from the Reader's Digest were aligned with the vocabulary domain and competencies of the K to 12 curriculum guide in English May 2016, First Quarter to Fourth Quarter. The experiment lasted for 6 sessions 2-3 hours per session. As to the output of this study, the researcher modified the reading materials which are contextualized and localized. This was based on RA 9155 or Governance on Basic Education Act of 2001 section 2 which states that it must be encourage local initiatives for improving the quality of basic education. Also, in RA 10533 or Enhanced Basic Education Act of 2013 section 5 - says that the DepEd shall adhere to the following standards and principles in developing the enhanced basic education curriculum: (d) the curriculum shall be contextualized and global. DepEd order 32, s.2015 defines contextualization, localization and indigenization based on historical use and experiences in the Philippine public schools. DepEd Order 35, s.2016 The teacher's guide and learners material may be modified to accommodate the unique contexts of a particular locality.

5. Presentation, Analysis and Interpretation of Data

Vocabulary Level of Grade 9 Students Using Paper Glosses

Table 2

Result of Vocabulary Tests in Paper Glosses

Score	Number of respondents for Pretest Controlled Group	Number of respondents for Post test Controlled Group	Vocabulary Level
41-50	0	0	Advanced
31-40	0	5	Upper Intermediate
21-30	4	19	Intermediate
11-20	25	7	Elementary
1-10	2	0	Beginner

Table 2 presents the result of vocabulary test of Grade 9 students using Paper Glosses. As shown in the Table 2, there were 2 or 6.45% beginner during the pretest and 0 or 0% during the posttest which means that the 6.45% of the respondents improved upon using the paper annotation. There were 25 or 80.64% of students who belonged

in Elementary level during the pretest however it was reduced up to 18 or 58.06% which indicates that there were 18 respondents who improved in their vocabulary. For the intermediate level, there were 4 or 12.90% of students during the pretest and 19 or 61.29% of students during the posttest there was a 15 or 48.38% of students increase for this level. Moreover, there were 5 or 16.12% of Upper Intermediate during the posttest and 0 or 0% during the pretest. None of the respondents got a score of 41-50 therefore, 0 out of 31 respondents can be considered advanced. With the mean difference of -9.67 shown in table 2.1. The 71 % increment in the students' vocabulary acquisition. The following were Hee Ko's (2005) findings in his study was also evident in the present study: The glosses really helped the readers understand new words more accurately by preventing incorrect guessing; It also minimized interruptions while reading was in process; Glosses also help the readers build bridges between prior knowledge or experience and new information in the text; Lastly, it made the readers less dependent on their teachers, allowing the students for greater autonomy since not all students have problems with the same words they can look up just the words they do not know.

Table 2

Mean Difference of Controlled Group (Paper glosses)

Post-test	Pre-test	Mean Difference
X= 26.06	X = 16.39	D= 9.67

Vocabulary Level of Grade 9 Students Using Multimedia Annotations

Table 3

Result of Vocabulary tests in Multimedia Annotations

Score	Number of respondents for Pretest Experimental Group	Number of respondents for Posttest Experimental Group	Vocabulary Level
41-50	0	0	C1(Advanced)
31-40	0	12	B2(Upper Intermediate)
21-30	8	12	B1 (Intermediate)
11-20	22	7	A2 (Elementary)
1-10	1	0	A1(Beginner)

Table 3 presents the vocabulary level of grade 9 students using multimedia annotation. As shown in the table, none of the respondents belonged to the Advanced level while there were 12 students or 38.70 % belonged to B2 Upper Intermediate which means that there were 12 students who obtained a total score of 31-40 during the post test. The difference between the numbers of respondents who were able to obtain the score of 31-40 during the pre-test and post-test was remarkable. There were 8 or 25.80 % of students belonged to the Intermediate level during the pre-test and 12 or 38.70% during the post-test which means that there were 4 or 12.90% respondents who improved during the post test. Moreover, from 22 or 70.79% of the students during the pre-test, the number of respondents were reduced to 7 or 22.58% which implies that there were 15 or 48.38% students who improved their vocabulary skills upon using multimedia annotations. None of the respondents obtained a score of 1-10 during the post-test this means that the student who attained the score of 1-10 during the pre-test improved his/her performance.

The 54.7% increment in students' vocabulary acquisition implies that there was an improvement as to the vocabulary levels of the respondent. As shown in Table 3.1, it says that there was a mean difference of -9.87 which only reveals that the use of multimedia annotation was effective when it comes to improving the students' vocabulary level. The findings were similar with Zarei and Mahmoudzadeh's study where it was proven that by means of multimedia glosses in English classrooms, teachers can create a pleasant situation for teaching and keep learners interested and motivated by adding more pictures and even music to the instructional program. Students also can have a better comprehension with less difficulty. The result of the study can also be associated with the conclusion proposed by the Dual Coding Theory suggested by Paivio (1986) stating that when both verbal and visual materials as presented to learners they can construct referential connections between these two forms of

mental representation, and thus learn more effectively. As expected, all the words that were dually coded were learned better than words with text only definitions. However, words with text and picture annotations were remembered better than words with text and picture.

Table 3.1

Mean Difference of Experimental Group (Multimedia Annotations)

Post test	Pretest	Mean Difference
X = 27.90	X=18.03	D = 9.87

Table 4

Summary of Vocabulary Levels

Vocabulary Level	No. of students from Controlled Group (Paper Glosses)	No. of students from Experimental Group (Multimedia Annotations)
Advanced	0	0
Upper- Intermediate	5	12
Intermediate	19	12
Elementary	7	7
Beginner	0	0

Significant Difference between Multimedia Annotations and Paper Glosses

Table 5

T- test Result of Controlled Group and Experimental Group

Indicator	
Post-test result (multimedia annotation/gloss)	27.90
Post-test result (paper annotation/gloss)	26.06
T- computed value	-5.276
T- tabular value	1.697
Interpretation	The hypothesis of the study is accepted since the tabular value is greater than the T-computed value.

Table 4. Shows the summary of T test computation of both groups. Since the tabular value is greater than the computed value it implies that there is no significant difference between the two strategy, the Multimedia annotations and Paper annotations. Both strategies are proven effective in developing students' vocabulary skills. For this reason, the strategies can be utilized in regular class during reading sessions. This finding supports Mohsen and Balakumar's findings that multimedia annotations were found to be more effective than a single annotation or no annotations in an L2 reading context. These data seem to suggest that both type of annotations can help the students to develop their vocabulary skills.

6. Conclusion and Recommendation

6.1 Findings

The data were analyzed, interpreted and presented with the following findings

- There was an increment of 71% on the students' vocabulary acquisition using paper annotation and 54% on students' vocabulary acquisition using multimedia annotation.
- The vocabulary level of grade 9 students using paper annotations were 5 or 16.12% for Upper Intermediate, 19 or 61.29% for Intermediate and 7 or 22.58 for the elementary level.
- The Vocabulary levels of Grade 9 students using multimedia annotation were 12 or 38.70% for both Upper Intermediate and Intermediate and 7 or 22.58% for elementary.

- The number of respondents who belonged to Upper Intermediate level from Experimental Group is higher than the Controlled Group. However, the difference of respondents who belonged to the intermediate level from pretest to post test is better.
- The computed value of -5.276 and tabular value of 1.697 indicate that there is no significant difference between the vocabulary levels of grade 9 students using multimedia annotation and paper annotation.

6.2 Conclusions

- The students' vocabulary acquisition using paper annotation has achieved higher improvement than the multimedia annotation.
- There is a better improvement on the students' vocabulary acquisition using paper annotation.
- Both Paper and Multimedia annotation are effective strategies in improving students' vocabulary acquisition based on the result of the study.

6.3 Recommendations

The researcher formulated the following recommendations based on the conclusions of the study.

- Use the paper annotation and multimedia annotation strategies to all students in all grade levels especially during reading sessions for more conclusive results.
- Contextualized the places and names in the stories/ materials used in this study.
- Introduce the paper annotated materials during LAC sessions to the language teachers to help improve students' vocabulary acquisition.

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