THE IMPLEMENTATION OF COMPUTER ASSISTED LANGUAGE LEARNING (CALL) TO IMPROVE SPEAKING ABILITY OF STUDENTS IN BALI STATE POLYTECHNIC

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ABSTRACT

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Article History: Received: 26/07/2020 Accepted: 30/11/2020 Available Online: 30/11/2020 Preliminary observations conducted in Bali State Polytechnic found that the students' learning outcomes in speaking were still shallow. Modern facilities equipped with advanced technology such as computer devices known as CALL (Computer Assisted Language Learning) are vital to helping lecture in language teaching and learning process, including speaking. This study aims to improve student speaking learning outcomes in English courses by conducting CALL and how CALL can make a contribution in increasing speaking ability in Vocational Higher Education. The research method used in this research was mix method approach. The subjects were the students of Electrical Engineering, Bali State Polytechnic. The data were analyzed quantitatively and descriptively. The results showed that the video-assisted CALL method's application could improve student learning outcomes in English courses.int shows the differences in the pre-test and post-test results, where there is an increase of 14.34%. Besides, the CALL method also allows students to have more expressive activities in presenting conversation among their friends to feel happy and interested. Similarly, CALL can also create fun learning since the students learn using the internet and computer, which are commonly used.

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A. Introduction

Nowadays, there are many schools and even Universities that have modern and adequate facilities, including various technology products. This technology product is available to help lecturers in teaching and learning. Teaching and learning English using a computer device program is commonly called *CALL* (*Computer Assisted Language Learning*). Beatty defines CALL as the process of using computers in learning, which results in learner's language improvement.¹ CALL covers the issues of material design, technology, theories of pedagogical and instruction modes. CALL can be implemented in and out of the class. This certainly has a positive influence in developing students' language skills, especially speaking which requires a special approach and method in teaching, as explained by Egbert & Hanson-Smith that: "a great deal of face to face communication is nonverbal, seeing while listening can be very helpful in preparing learners for encounters with real (i.e. actual, not virtual) native speakers.² Egbert & Hanson-Smith further explained that "actual English spelling, the machine does better." Therefore, with clarity and accuracy of the pronunciation generated by a computer can also minimize errors in the pronunciation of words or phrases that can be done by humans.

In relation to English Teaching as a foreign language (EFL), the paradigm of English education in the Higher Education or University, especially vocational high education, has moved to the communicative language teaching (CLT) approach, which refers to the ability of language learners to use socially, contextually and culturally appropriate

¹ Ken Beatty, *Teaching and Researching: Computer-Assisted Language Learning*, 2nd ed. (London: Longman Pearson Education, 2011), 1. language in communicative contexts.³ However, Jeong argues most Vocational Educations Hiaher seem to have difficulties in developing their communicative competence beyond the class, mostly because they do not have a supportive learning environment where they can hear and speak English for communicative purposes.⁴ It also needs to expand their language learning through experiences and practices the Target Language more. Using the computer as the technology combined with the internet connection is the best way to practice the implementation of Computer Assisted Language Learning (CALL), especially speaking ability.

Speaking is transferring knowledge and expressing one idea. thought. desires, and willingness into a good pattern, and ordinary speech is used to talk or recognize another. Speaking requires that learners know how to produce specific language points such as grammar, pronunciation, or vocabulary, however understanding why and what to produce language ways (sociolinguistics competence). Therefore, speaking can convey ideas, thoughts, and feelings to other people to uttering something based on comprehension, accuracy, and fluency.

² Joy Egbert and Elizabeth Hanson-Smith, *CALL Environments: Research, Practice, and Critical Issues* (Virginia: Teachers of English to Speakers of Other Languages (TESOL), 2007), 124.

³ S. Savignon, "Communicative Competence: Theory and Classroom Practice," 1997, 212, https://doi.org/10.2307/330239.

⁴ K-O. Jeong, "Promoting Communicative Language Teaching in EFL Context: An English Writing Course Mediated Through the Web," *English Language Teaching* 18, no. 3 (1996): 47– 68.

In reality, there is limited knowledge of the human resources that mediate the change itself (the instructor or lecturer), making the facilities available at the school cannot be maximally empowered. Many universities have provided adequate facilities; however, the instructors or lecturers are still implementing conventional systems such as reading texts orally from textbooks, so the productivity of these facilities will be meaningless. However, if the instructor or lecturer can utilize existing technology, it will be easier to implement CALL (Computer Assisted Language Learning) in improving students' speaking abilities.

Based on Atkins and Vesu, teachers' attitudes have a significant influence on the use of computers in class learning.⁵ Similarly, Lam also stated that teachers' personal beliefs of the advantages of using technology for language teaching influence teachers' regarding technology use.6 decision However, Egbert, et. al said that a positive attitude toward computer technology does not guarantee that teachers or lecturers will use technology in the class. This is because they lack experience, insufficient time, computer anxiety, and lack of confidence. Even the students have

positive attitudes toward the use of technology.⁷

Some of the previous studies have shown that CALL use has advantages and disadvantages in language learning. CALL offers English teachers and learners to have more offers in the future.⁸ Afshari et. al. also notified that CALL is indicated to have been useful, easy to be used.9 However, Rafiee and Purfallah found that the students in Iran have different perceptions of dealing with the use of CALL in the classroom.¹⁰ Most of the existed studies have focused on the use of CALL in English language learning classroom which majority of the subjects are students from English department or they have adequate English language background knowledge (see Pirasteh.¹¹

⁵ Nancy Atkins and Ellen Vasu, "Measuring Knowledge of Technology Usage and Stages of Concern About Computing: A Study of Middle School Teachers," *Journal of Technology and Teacher Education* 8, no. 4 (2000): 279–302.

⁶ Yvonne Lam, "Technophilia vs. Technophobia: A Preliminary Look at Why Second-Language Teachers Do or Do Not Use Technology in Their Classrooms," *Canadian Modern Language Review* 56, no. 3 (2000): 389–420, https://doi.org/10.3138/cmlr.56.3.389.

⁷ Joy Egbert, Trena Paulus, and Yoko Nakamichi, "The Impact of CALL Instruction on Classroom Computer Use: A Foundation for Rethinking Technology in Teacher Education," *Language Learning & Technology* 6, no. 3 (2002): 108–26.

⁸ Masoud Hashemi and Masoud Aziznezhad, "Computer Assisted Language Learning Freedom or Submission to Machines?," *Procedia - Social and Behavioral Sciences* 28 (2011): 832–35, https://doi.org/10.1016/j.sbspro.2011.11.152.

⁹ Mojgan Afshari et al., "Students' Attitudes Towards Computer-Assisted Language Learning," *Procedia - Social and Behavioral Sciences* 103 (2013): 852–59,

https://doi.org/10.1016/j.sbspro.2013.10.407.

¹⁰ Seyed Jaafar Rafiee and Saeedeh Allahverdi Purfallah, "Perceptions of Junior High School Teachers toward Computer Assisted Language Learning (CALL) within the Context of Azarbayjan Provinces," *Procedia - Social and Behavioral Sciences*, Proceedings of the International Conference on Current Trends in ELT, 98 (2014): 1445–53,

https://doi.org/10.1016/j.sbspro.2014.03.564.

¹¹ Parvin Pirasteh, "The Effectiveness of Computer-Assisted Language Learning (CALL) on Learning Grammar by Iranian EFL Learners," *Procedia -Social and Behavioral Sciences*, Proceedings of the International Conference on Current Trends in ELT,

Basoz,¹² Zaini,¹³ and Barani¹⁴). There is limited research about the use of CALL in language classroom where the subjects were the students from non-English department students, especially the students from the Electrical Engineering department, Bali State Polytechnic.

Based on this phenomenon, it is considered necessary to apply CALL (Computer Assisted Language Learning) based teaching and learning in improving the ability to speak by the students of Bali State Polytechnic through the use of computer combined with the internet.

B. Method

This study was classroom-based, it deals with some classroom variables. This design involved one group of pre-test, exposed to a treatment, and post-test. The pre-test was given before treatment, while the post-test was given after the students received treatment. The treatment was carried out in the form of a pilot study by the use of CALL.

98 (2014): 1422–27, https://doi.org/10.1016/j.sbspro.2014.03.561.

¹² Tutku Başöz and Feryal Çubukçu, "Pre-Service EFL Teacher's Attitudes towards Computer Assisted Language Learning (CALL)," *Procedia -Social and Behavioral Sciences*, 5th World Conference on Educational Sciences, 116 (2014): 531–35,

https://doi.org/10.1016/j.sbspro.2014.01.253.

¹³ Amin Zaini and Golnar Mazdayasna, "The Effect of Computer Assisted Language Learning on the Development of EFL Learners' Writing Skills," *Procedia - Social and Behavioral Sciences* 98 (2014): 1975–82, https://doi.org/10.1016/j.sbspro.2014.03.631.

¹⁴ Ghasem Barani, "The Relationship between Computer Assisted Language Learning (CALL) and Listening Skill of Iranian EFL Learners," *Procedia Social and Behavioral Sciences* 15 (2011): 4059– 63.

The methods used were descriptive and quantitative research using mix approach, method as stated bv Sugiyono.¹⁵ It involved students of the Department of Electrical Engineering semester 2, Electrical Engineering Study Program on class 2C. This class was chosen because the students' ability to speak is lack. It is proven when the researcher invited them to speak, they were shy and not confident when uttering something. There are several steps in this study, namely, (1) Observation, with observation the researcher can obtain data naturally, (2) Recording, verbal utterances between students who have conversations recorded by audiorecording, (3) Transcribing, utterances will be transcribed into the text form both pretest and post-test (4) Comparing which changes will have a significant impact whether with conventional methods or the application of CALL (Computer Assisted Language Learning), (5) After that, making the score based on the evaluation score in speaking, Making (6) conclusions.

C. Results

From the findings obtained, there were significant changes in the learning outcomes of speaking during eight times meetings. Each meeting lasts for 50 minutes, and the meeting consists of watching a video given by the researcher. The video itself was about the expression of *Past Tense*, rather than provide them with a presentation by powerpoint. The

¹⁵ Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif Dan R & D* (Bandung: Alfabeta, 2013), 9.

implementation of learning using the video-assisted *CALL* method can improve student learning outcomes shown from the increase in student scores during the pre-test to implement post-tets, as seen from the figure below.

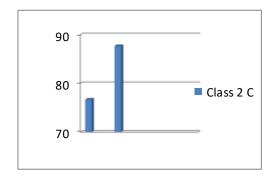


Fig 1. Pre-test and post-test result

The improvement in learning outcomes obtained by speaking showed that learning English using the CALL method aided by video media will provide the widest opportunity for students to be directly involved in the learning process and build their knowledge to help students increase learning motivation interestingly and presented attractively. Therefore students feel enthusiastic and enthusiastic about learning English. These findings support Sciarone and Meijer's statement in their research stating that CALL offers an advantage compared to traditional teaching and learning method.¹⁶ Hence, the considerable feedback is also needed to get a better result.¹⁷

¹⁷ Elisabeth Van der Linden, "Does Feedback Enhance Computer-Assisted Language Learning?,"

The application of the CALL method with video assistance motivates student learning in speaking to better prepare material to be discussed or discussed in presenting student conversations. Students are required to be able to understand the concept of speech and comprehend the material in full so that what is conveyed when delivering the conversation is clearer and understandable by the listener so that the conversation will be more effective. In addition, the CALL method also allows students to have a more expressive speaking not only when express their idea in knowing the Past Tense but also when conducting a conversation with their friends concerning the same topic (Past Tense), they are not only required to understand the material and only use words; however, how do they deliver a conversation as same as the native speaker's do so that makes them enjoyed and interested in making the conversations. This data also confirmed Philip's research that CALL is also useful in teaching grammar since the students liked the software and were convinced that it had had a positive impact on their English learning.¹⁸

This is also in line with what was expressed by Tarigan stated that speaking is more than just saying sounds

¹⁶ A. G. Sciarone and P. J. Meijer, "How Free Should Students Be? A Case from CALL: Computer-Assisted Language Learning," *Computers & Education*, Special Issue Exploring the Nature of Research in Computer-related Application in Education, 21, no. 1 (1993): 95–101, https://doi.org/10.1016/0360-1315(93)90052-K.

Computers & Education, Special Issue Exploring the Nature of Research in Computer-related Application in Education, 21, no. 1 (1993): 61–65, https://doi.org/10.1016/0360-1315(93)90048-N.

¹⁸ Philip Swann, "Computer Assisted Language Learning for English as a Foreign Language," *Computers & Education* 19, no. 3 (1992): 251–66, https://doi.org/10.1016/0360-1315(92)90119-P.

or words.¹⁹ Speaking is a means that consumes ideas that are arranged and developed according to the listeners' needs.

D. Conclusion

Based on the analysis results, it can be concluded that there is an increase in the speaking results of PNB students by using Computer Assisted Language Learning (CALL). This is proven because by application of CALL could invite students' responsibility, call for students' activeness, and builds communicative relation to the students since the activities were designed for group which needs teamwork and activeness to finish the task given by the lecturer. Besides, CALL creates fun learning since they enjoyed when construct their thoughts. The lecturers are then suggested to be more innovative and creative in designing learning methods that can cause students and to feel happy enthusiastic in participating in learning English in particular, because it is the good impression that arises from students' minds when we as creative instructors.

References

Afshari, Mojgan, Simin Ghavifekr, Saedah Siraj, and Duan Jing. "Students' Attitudes Towards Computer-Assisted Language Learning." Procedia - Social and Behavioral Sciences 103 (2013): 852-59. https://doi.org/10.1016/j.sbspro.201 3.10.407.

- Atkins, Nancy, and Ellen Vasu. "Measuring Knowledge of Technology Usage and Stages of Concern About Computing: A Study of Middle School Teachers." Journal Technology and of Teacher Education 8, no. 4 (2000): 279–302.
- Barani. "The Relationship Ghasem. between Computer Assisted Language Learning (CALL) and Iranian Listening Skill of EFL Learners." Procedia Social and Behavioral Sciences 15 (2011): 4059-63.
- Başöz, Tutku, and Feryal Çubukçu. "Pre-Service EFL Teacher's Attitudes towards Computer Assisted Language Learning (CALL)." *Procedia - Social and Behavioral Sciences*, 5th World Conference on Educational Sciences, 116 (2014): 531–35. https://doi.org/10.1016/j.sbspro.201 4.01.253.
- Beatty, Ken. *Teaching and Researching: Computer-Assisted Language Learning*. 2nd ed. London: Longman Pearson Education, 2011.
- Egbert, Joy, and Elizabeth Hanson-Smith. *CALL Environments: Research, Practice, and Critical Issues.* Virginia: Teachers of English to Speakers of Other Languages (TESOL), 2007.
- Egbert, Joy, Trena Paulus, and Yoko Nakamichi. "The Impact of CALL Instruction on Classroom Computer Use: A Foundation for Rethinking Technology in Teacher Education." *Language Learning & Technology* 6, no. 3 (2002): 108–26.
- Hashemi, Masoud, and Masoud Aziznezhad. "Computer Assisted Language Learning Freedom or Submission to Machines?" *Procedia* - *Social and Behavioral Sciences* 28 (2011): 832–35. https://doi.org/10.1016/j.sbspro.201 1.11.152.

¹⁹ Henry Guntur Tarigan, *Berbicara Sebagai Suatu Keterampilan Berbahasa* (Bandung: Angkasa, 1983), 33.

- Jeong, K-O. "Promoting Communicative Language Teaching in EFL Context: An English Writing Course Mediated Through the Web." *English Language Teaching* 18, no. 3 (1996): 47–68.
- Lam, Yvonne. "Technophilia vs. Technophobia: A Preliminary Look at Why Second-Language Teachers Do or Do Not Use Technology in Their Classrooms." *Canadian Modern Language Review* 56, no. 3 (2000): 389–420. https://doi.org/10.3138/cmlr.56.3.38 9.
- Pirasteh, Parvin. "The Effectiveness of Computer-Assisted Language Learning (CALL) Learning on Grammar by Iranian EFL Learners." Procedia - Social and Behavioral Sciences, Proceedings of the International Conference on Current Trends in ELT, 98 (2014): 1422-27. https://doi.org/10.1016/j.sbspro.201 4.03.561.
- Rafiee, Seved Jaafar, and Saeedeh Allahverdi Purfallah. "Perceptions of Junior High School Teachers toward Computer Assisted Language Learning (CALL) within the Context of Azarbayjan Provinces." Procedia -Social and Behavioral Sciences, Proceedings of the International Conference on Current Trends in ELT. 98 (2014): 1445-53. https://doi.org/10.1016/j.sbspro.201 4.03.564.
- Savignon, S. "Communicative Competence: Theory and Classroom Practice," 1997. https://doi.org/10.2307/330239.
- Sciarone, A. G., and P. J. Meijer. "How Free Should Students Be? A Case CALL: Computer-Assisted from Language Learning." Computers & Education, Special Issue Exploring the Nature of Research in Application Computer-related in Education, 21, no. 1 (1993): 95https://doi.org/10.1016/0360-101. 1315(93)90052-K.

- Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif Dan R & D*. Bandung: Alfabeta, 2013.
- Swann, Philip. "Computer Assisted Language Learning for English as a Foreign Language." *Computers & Education* 19, no. 3 (1992): 251–66. https://doi.org/10.1016/0360-1315(92)90119-P.
- Tarigan, Henry Guntur. *Berbicara Sebagai Suatu Keterampilan Berbahasa.* Bandung: Angkasa, 1983.
- Van der Linden. Elisabeth. "Does Feedback Enhance Computer-Assisted Language Learning?" Computers & Education, Special Issue Exploring the Nature of Research Computer-related in Application in Education, 21, no. 1 61–65. (1993): https://doi.org/10.1016/0360-1315(93)90048-N.
- Zaini, Amin, and Golnar Mazdayasna. "The Effect of Computer Assisted Language Learning on the Development of EFL Learners' Writing Skills." *Procedia - Social and Behavioral Sciences* 98 (2014): 1975–82. https://doi.org/10.1016/j.sbspro.201 4.03.631.