

Developing E-Modul Based Mobile Learning as an Interactive Media

Yosa Novia1), Yenni Rozimela 2), M. Zaim 3)

^{1,2,3)} Ilmu Keguruan Bahasa, Universitas Negeri Padang

*Corresponding Author, email: yosa_novia@upiypk.ac.id

Abstract. English is still a frightening spectrum for most students in Indonesia. English learning with conventional methods is one of the causes of students' lack of motivation in learning English which has an impact on their low English language skills. One way that can be done to resolve this problem through E-Module as an interactive media. The aim of this case study was to examine the improvement of students' motivation and English ability by using E-Module based on mobile learning as an interactive media on teaching English. The students' motivation and ability were still fair. Based on the researcher's observation in classroom, most of students are not eager in studying English; they had difficulty in speaking, listening, reading, and writing. The research was done in two cycles. The data of this research were analyzed by using two techniques. The quantitative data was analyzed by using the mean score to see the average score gained by the students in individual E-Module based on mobile learning as an interactive media test on four skills. The qualitative data was analyzed through data conducted from observation, field notes and interview. The finding showed that the students' motivation and English ability for the Senior High School Student through E-Module based on mobile learning as an interactive media improved. The results of this research are expected to become recommendations for teachers to enhance the effectiveness of the learning English at school.

Keywords: E-Module, Mobile Learning, Senior High School, Students, Teacher

INTRODUCTION

English language has served as an important tool to speed up national development. In the present era of globalization, its place has become more and more important especially in the inter- national competition. However, efforts to provide good quality of English instruction in the secondary and primary schools have never come to a success (Huda, 2016). The growing importance of English in the last 20 years, strong knowledge of this language will become increasingly important as teenagers to be the workforce at this time. However, today, English is still considered a student as a subject that is difficult to learn. The National English Ability Test (NEAT) in South Korea has negatively branded both students and universities, deepening instead of alleviating the English divide (Lee et al., 2016).

English is still a frightening spectre for most students in Indonesia. English learning in vocational high schools is taught with conventional methods. This is one of the causes of students' lack of motivation in learning English which has an impact on their low English



language skills. The use of strategies that do not only initialize but also nurture students' internal motivation in order to enhance sustainable learning of English in and outside the classroom. Therefore, research on student motivation in learning English should be able to develop nurture students' internal motivation (Vibulphol, 2016). The students are relative highly motivated and found to be slightly more instrumentally motivated to learn English. This reveals that instrumental motivation is a significant factor among this group of students learning English (Suryasa, 2017).

While there is a vast gamut of proposals for the evaluation of teaching materials, these proposals are much less common in the field of senior Senior High School Student. Equally worthy of mention is that, if the evaluation of teaching materials is an important part of a teacher's work, then the checklist is a useful tool which facilitates materials selection, given the extensive array of Senior High School Student teaching materials available at present (Esteban, 2015). English for Senior High School Student focuses on developing English language communication skills in common not specific disciplines and needs. It pays attention to lesson plan and curriculum. According to the result of questionnaires, for the purpose of improving and upgrading the efficiency of Senior High School Student' public English teaching, the Senior High School Student teaching mode needs to be introduced into the school public English teaching and a suitable teaching system should be established for English major students. This helps to improve the quality of the public English teaching for English majors, realizing the goal of English teaching (Hui, 2017). However, in practice English is less used in schools, especially Senior High Schools. In fact, Practicing english can improve students' English skills. By having the existence of E-Module basen on mobile learning as an interactive media, e-module is expected that teachers and students can use it in the teaching and learning process of English at school. E-modul basen on mobile learning as an Interactive media is goal oriented and focused English teaching and learning, designed for the specific learners according to learners' academic and professional needs (Rahman, 2015). The learning motivation and performance of students taught using E-Module tool were superior to those of students taught using traditional learning tools in a situational English vocabulary learning environment (Huang et al., 2016).

E-Module based on mobile learning as an interactive media for English subjects that will be designed and applied is expected to attract students' motivation in learning English. E-Module is designed attractively and innovatively because it is equipped by images, learning animations, audio learning, and exercises that can immediately feedback (answers) instantly, so they will know which parts they have not mastered. In addition, E-Module is also expected to facilitate teachers in teaching English because E-Module will streamline the teacher's time to manually correct the exercises given to students. Thus, the teachers able to use efficient time to improve the quality of learning, for example doing classroom action research, etc.

Based on the conditions above, the research title "Developing E-Modul Based on Mobile Learning as an Interactive Media" is needed to be conducted to find out whether E-



Module as an interactive media, that will be designed and implemented can improve students' motivation and English ability. This research will be conducted in 2019 with a population of Senior High School (Teachers and Students) at the first year of SMAN 1 Nan Sabaris, West Sumatra.

METHODS

This two cycles classroom action research was aimed at finding solutions for one of problems in teaching English namely lack students' motivation and English ability through E-Module based on mobile learning as an interactive media. The research was conducted at SMAN 1 Nan Sabaris, West Sumatera. The subjects of the study were the first-year students. The class consisted of 31 students, 18 of them are boys and 13 girls. Students learning English can provide useful information regarding the process of teaching in the future (Marwan, 2017).

The data of this research was taken into two forms: qualitative data and quantitative data. The quantitative data was collected from tests. These data represent the students' skill in numerical ways. In other side, qualitative data concern with a description about factors that influence the change students' motivation and English ability through E-Module based on mobile learning as an interactive media. These data were representing the students' motivation and English ability that is taught in SMAN 1 Nan Sabaris, West Sumatra.

The research was conducted in two cycles with four meeting for each cycle. Three meetings are for doing classroom action research, and one meeting is for the test. Each cycle consisted of four steps; planning, action, observation, and reflection suggested by Kemmis and Taggart (1988). Pertaining to classroom action research Kemmis and Taggart (1988) state that there are some steps of cyclical process done in classroom action research as in the following: 1) Plan; 2) Action; 3) Observation; 4) reflection. This research did in two cycles by using E-Module based on mobile learning as an interactive media to improve the students' motivation and English; each cycle has three meetings; each meeting with the allocation time 2 x 35 minutes = 70 minutes. Practically, the activities of the research can be drawn as in the following:

From the four steps, the action research spiral can be drawn as follows.

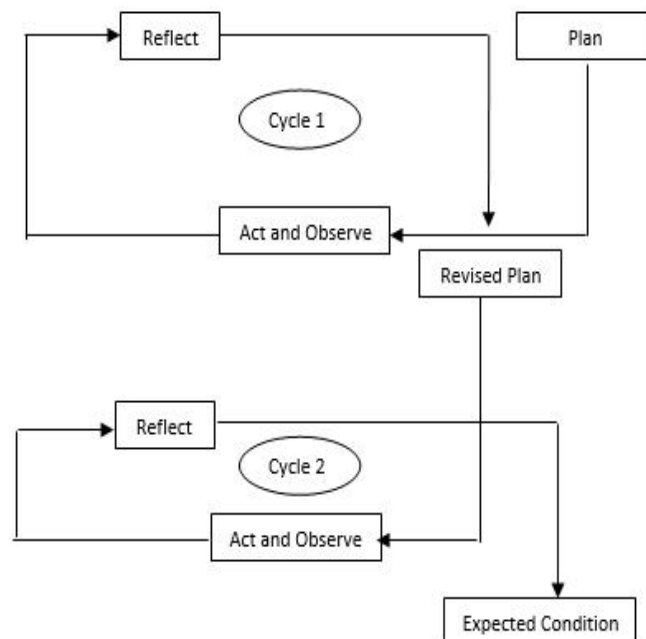


Figure 1. Steps Of Cyclical Process in A Classroom Action Research

To collect the data of this research, the direct observation was conducted, the field note was used, and test was administered as in the following: test, observation, and interview. After teaching the students by using E-Module based on mobile learning as an interactive media, the students were given a test to know their progress. It was analyzed by using assessment scoring. The researcher prepared observation checklist of E-Module based on mobile learning as an interactive media and English activities for a collaborator during teaching and learning activities in the classroom whether the procedures of teaching by using E-Module based on mobile learning as an interactive media were completely implemented and whether the students follow the teaching and learning activities. Furthermore, during observation, the collaborator used field note to collect information that in occur the teaching and learning of using E-Module based on mobile learning as an interactive media. It was done by taking notes from the activities of the teacher and students. Interview was used to support the data obtained from the test, conducted to know about the students' comments or opinions of the implementation of E-Module based on mobile learning as an interactive media.

In analyzing the quantitative data, the data from the test of vocabulary was analyzed. The vocabulary test of each cycle was analyzed by using formula as in the following: (a) For the reading test, each correct answer was given score=10; (b) For the vocabulary test, each correct answer was given score=20; (c) For the structure test, each correct answer was

given score=10; (d) The total score: reading test ($10 \times 1 = 10$), vocabulary test ($20 \times 1 = 20$), structure test ($20 \times 1 = 20$); (e) Maximum score = 100; (f) Students score = (Total

correct answers: Total items) x 100

Moreover, to describe the improvement of the students' English ability, the researcher evaluated and analyzed the score of students' English test by using the formula below:

$$m = \frac{\sum fx}{N}$$

m = mean

\sum = the sum of

f = the frequency with which a score occurs

N = the total of the students

(Adopted from Heaton (1998: 176))

Furthermore, the qualitative data was used to analyze the information relate to the factors that influence students' motivation and English ability by using E-Module based on mobile learning as an interactive media. This data was analyzed to be relating with quantitative data. It described and explained the result collected from quantitative data.

Qualitative analysis describes briefly about some factors which influence the students' motivation and ability in English by using E-Module based on mobile learning as an interactive media. The factors are the use of media, materials, classroom activities, teacher strategy, and teacher approach used during the teaching and learning process.

RESULT AND DISCUSSION

The extent to which E-Module based on mobile learning as an interactive media for the visual communication design program could improve the students' motivation and English ability at the first year students of SMAN 1 Nan Sabaris.

As it was previously clarified, this research was carried out in two cycles. Each cycle had four meetings and every meeting was aided by a collaborator. The vocabulary mastery problems experienced by the students were meant to be solved. In order to overcome the students' motivation and English ability problems, the researcher and the teacher used E-Module based on mobile learning as an interactive media to improve the students' motivation and English ability. The existence of collaborator / raters and the instruments are needed during the research. It could be seen from the data analysis both qualitatively and quantitatively during two cycles as the following:

The First Cycle is analyzing and calculating the data. The mean score of students' motivation and English ability can be seen in the following.

Table 2. The Mean Score of students' motivation and English ability in the First Cycle

No	English Indicators	Mean Score
1	Speaking/listening	60
2	Structure	62
3	Reading	50
4	Writing	12

In accordance to the table above, in term of Speaking/Listening, the mean score achieved by the students were 60. Most of the students got scores students' KKM. In term of Structure, shows that the mean score of students was 62. In term of Reading, it shows that the students' mean score achieved 50 and In term of Writing is 12. Based on the explanation above, the findings of this research after completing the first cycle can be clarified that the mean score of all indicators were improved. It can be compared by the score before doing the research. The mean score of Speaking/Listening in the preliminary observation was 50, after the first cycle was 60. The mean score of Structure in the preliminary observation was 20, after the first cycle was 62. The mean score of Reading in the preliminary observation was 20, after the first cycle was 50 and the mean score of Writing in the preliminary observation was 0, after the first cycle was 12.

After analyzing the data from the test at the end of the first cycle, the researcher concluded that the students' motivation and English ability was improved. The improvement was made by the students in all indicators, speaking/listening, structure, reading and writing. The highest improvement made by the students was found in term of structure and the less improvement was found in term of writing. In short, the result was satisfactory, but in term of writing, the students still made many mistakes and there are 25% or 8 students of 31 students got score.

However, by looking at the increase of mean score of students' motivation and English ability test, it was indicated there was an improvement on students' motivation and English ability and the process of teaching and learning was improved. In other words, the research question has been answered but to achieve minimum standard achievement, there was need to continue to second cycle.

To reach the better level of students' motivation and English ability, the researcher, therefore, continued to the second cycle. After analyzing and calculating the data, the mean score of the students' motivation and english ability can be seen in the following.

Table 3. The Mean Score of Students' Motivation and English Ability in The Second Cycle

No	English Indicators	Mean Score
1	Speaking/listening	73
2	Structure	72



3	Reading	70
4	Writing	55

Based on Table 3 and 4, in term of speaking/ listening, it was obtained that the mean score of students' motivation and English ability was 73. In term of structure, the mean score achieved by the students was 72. In term of reading, it shows that the mean score achieved by the students was 70. And in term of writing was 55.

The improvement was found in the activities of description the object using E-Module English Specific Purpose. It means that E-Module as an interactive media could improve the students' motivation and English ability in each indicator. The researcher and the collaborator thought that to not continue the action to the next cycle, because there was the Improvement in each indicator speaking/listening, structure, reading and writing by using E-Module English Specific Purpose. In each indicator, the mean scores had achieved higher than students' KKM. So, it does not need to move another cycle.

As clarified previously, this research was carried out in two cycles, each cycle had three meetings. It was conducted at first year of SMAN 1 Nan Sabaris. The class was chosen due to the motivation and English ability problems happening to the students. To overcome the students' problems, the researcher and teacher applied E-Module as an interactive media to improve the students' motivation and English ability. Data analysis done during two cycles, the researcher found that applying E-Module as an interactive media could improve the motivation and English ability in terms of speaking/listening, structure, reading and writing. It was found that the result of students' motivation and English ability result in all tests can be described as in the following.

Table 4. The Improvement of the students' Mean Score in All Tests

No	English Indicators	Mean Score		
		Preliminary	Cycle I	Cycle 2
1	Speaking/listening	50	60	73
2	Structure	50	62	72
3	Reading	0	50	70
4	Writing	0	12	55
	Average	15	46	67,5

Furthermore, the improvement of students' motivation and English ability can be showed by the Figure 2. The Table 4 and Figure 2 above show that the students' motivation and English ability of each indicator improved in each cycle. It can be clarified that the improvement of students' motivation and English ability at the first cycle based on the mean score of all indicators is good enough particularly in term of speaking/listening, structure, reading and writing. The researcher and collaborator decided to continue the classroom action research to the second cycle. It was obtained that the students' mean score in term of speaking/ listening was 73, in term of structure was 72, in term of reading was 70 and writing was 55. It means that all indicators made good improvement. In other words, the students' motivation, and English ability at the end of the second cycle improved. This is also supported by the results of research that show the interdisciplinary-

based project (listening, speaking, reading and writing) should be implemented in a language classroom to enhance the learners' English skills (Poonpon, 2017).

The improvement of students' motivation and English ability mastery could be seen through the average score of each indicator of tasks in every meeting. There was the changing of the improvement caused by many factors. Those factors were identified through the observation sheet and field note which were made by the collaborator together with the researcher and supported with the interview result which was done after the teaching and learning process. After having analyzed the data obtained from the test, observation, field notes, and interview, the findings of classroom action research can be concluded as follows: (1) The implementation of E-Module based on mobile learning as an interactive media improves the students' motivation and ability in English at grade X of SMAN 1 Nan Sabaris in academic year 2019/2020. The improvement is shown by the increasing of the students' mean score in all English tests in each indicator from cycle one up to cycle two; and (2) There are some factors that influence the changes of the students' motivation and ability in English in teaching by using E-Module based on mobile learning as an interactive media's as in the following: interesting media, interesting materials, classroom activity, teacher strategy, and teacher's approach.

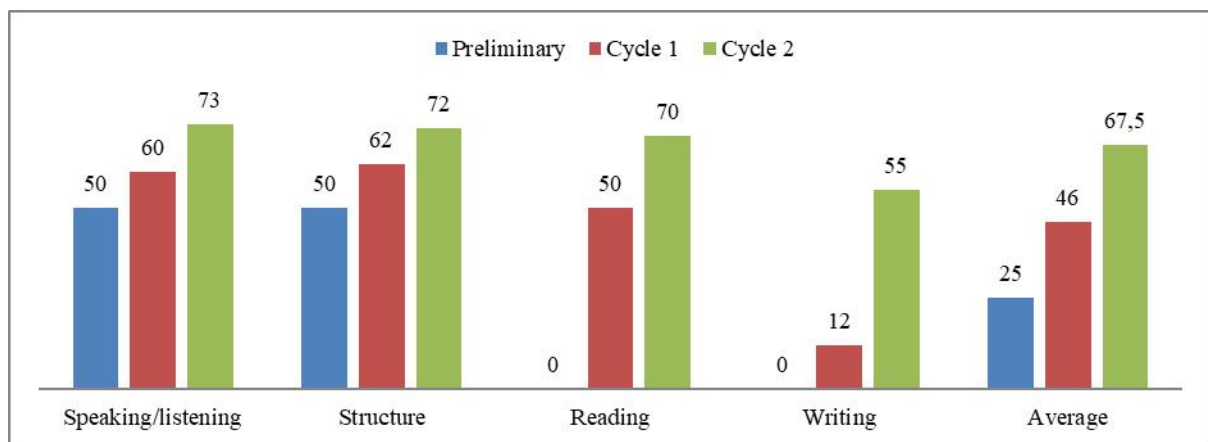


Figure 2. The Improvement of Mean Score of the Students' Motivation and English Ability

The First Factor is interesting media. E-Module based on mobile learning as an interactive media is used as model for student in learning vocabulary mastery. The students rehearse their structure, pronunciation, spelling, meaning, and using words in sentences based on E-Module based on mobile learning as an interactive media. Through E-Module based on mobile learning as an interactive media, all students can see the real of materials that is learned. Then, the students practice on English tests after get model from E-Module based on mobile learning as an interactive media. The second factor is interesting materials. The materials use in this research is interesting and familiar to the students. The students are eager to learn and active involved in teaching and learning process. The third factor is classroom activity. The classroom activity is one factor which can influence students' motivation and ability in English. By varying the classroom activities, the researcher can make the students more challenging in teaching English. The fourth factor is teacher strategy. Teacher strategy is also one factor that influences the changing of the improvement of vocabulary mastery. The strategy applied by the teacher has improved the students' motivation and

139

Publish By

The Association of Community Service Lecturers of Indonesia (ADPI)

Jl. Komp. Unand Padang Besi Kec. Lubuk Kilangan, Kota Padang. Sumatera Barat

Code 25166

Website: www.adpi-indonesia.id

Email : info@adpi-indonesia.id

Phone : +62 823-8662-2140



English ability in the classroom. Beside that their motivation increased during the strategy used to develop the students' motivation and English ability. The fifth factor is teacher's approach. To make students feel secure; the researcher gives the personal approach. The approach can make some students motivated to do some activities.

CONCLUSION

This research focuses on using E-Module based on mobile learning as an interactive media. In improving students' motivation and English ability and explaining the factors influencing the changes of students' motivation and English ability by using E-Module based on mobile learning as an interactive media at first year of SMAN 1 Nan Sabaris in academic year 2019/2020. Based on the background of the problem, most of students had lack of motivation and English ability. After having analyzed the data obtained from the test, observation, field notes, and interview, the findings of classroom action research can be concluded as follows: The implementation of E-Module based on mobile learning as an interactive media improves the students' motivation and English ability at first year of SMAN 1 Nan Sabaris in academic year 2019/2020. The improvement is shown by the increasing of the students' mean score in speaking/listening, structure, reading and writing tests in each indicator from cycle one up to cycle two.

There are some factors that influence the changes of the students' motivation and English ability in teaching by using E-Module based on mobile learning as an interactive media in the following: media, material, method of teaching, teacher, etc.

ACKNOWLEDGMENTS

I would like to thank Prof. Yenni Rozimela, Ph.D dan Prof. Dr. M. Zaim, M.Hum from Universitas Negeri Padang who have giving suggestion and contribution to this article and the anonymous reviewers for valuable feedback.

REFERENCES

- Bojevic, M. (2016). Teaching Foreign Language for Specific Purposes: Teacher Development. Association for Teacher Education in Europe. Proceedings of the 31st Annual ATEE Conference. [diunduh 3 Juni 2017]. Tersedia di www.pef.uni-lj.si/atee/978-961-6637-06-0/487-493.pdf
- Education First. (2016). *IndeksKecakapanBahasaInggris*. EF Education First Ltd. [diunduh 10 Mei 2017]. Tersedia di www.ef.com/ep
- Esteban, A. A. (2015). Authenticity in the Teaching of ESP : An Evaluation Proposal. 1(1), 35-43.
- Flynn, S.2018. A module on Learning Technologies for teachers in Higher Education. Italian Journal of Educational Technology, 26(1), 119-129. doi: 10.17471/2499-4324/995



- Hutahaeen et all. 2019. Need Analysis of the Development of Economics Interactive E-Module Based on Contextual Teaching and Learning for SMA. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal Volume 2, No 2, May 2019, Page: 343-350 e-ISSN: 2655-1470 (Online), p-ISSN: 2655-2647 (Print).
- Hariguna T., Akmal. 2019. Assessing students' continuance intention in using multimedia online learning. *Telkomnika (Telecommunication Computing Electronics and Control)*, 17(1), 187–193. <https://doi.org/10.12928/TELKOMNIKA.v17i1.10328>
- Heaton, J. B. (1998). *Writing English Language Tests*. London: Longman
- Huang, C. S. J., Yang, S. J. H., Chiang, T. H. C., & Su, A. Y. S. (2016). Effects of Situated E-Module Approach on Learning Motivation and Performance of EFL Students. *Journal of Educational and Society*, 19, 263–276.
- Huda, N. (2016). A National Strategy in Achieving English Communicative Ability: Globalization Perspectives. *The Journal of Education*, 281–292.
- Hui. (2017). The Learning Needs Analysis of English for Specific Purposes (ESP) in College. *US-China Foreign Language*, 15(1), 1–6. <https://doi.org/10.17265/1539-8080/2017.01.001>
- Johnston N. 2010. Is an Online Learning Module an Effective Way to Develop Information Literacy Skills?, *Australian Academic & Research Libraries*, 41:3, 207-218, DOI: 10.1080/00048623.2010.10721464
- Jingjit, M. 2015. The effects of multimedia learning on Thai primary pupils' achievement in size and depth of vocabulary knowledge. *Journal of Education and Practice (Online)*, Vol. 6. No. 32, ([http:// www.iiste.org](http://www.iiste.org)), 72-81.
- Kemmis, S and R. McTaggart. (1988). *The Action Research Planner*. Victoria: Deakin University
- Lee, H., Lee, K., & Lee, K. (2016). An Analysis of the Failure (s) of South Korea ' s National English Ability Test. *The Asia-Pacific Education Researcher*. <https://doi.org/10.1007/s40299-016-0301-6>
- Marwan, A. (2017). ESP teaching challenges in an indonesian vocational higher institution. *The English Teacher*, XXXVIII, 1–12.
- Poonpon, K. (2017). ENHANCING ENGLISH SKILLS THROUGH PROJECT-. *The English Teacher*, XL, 1–10.
- Rahman, M. (2015). English for Specific Purposes (ESP): A Holistic Review. *Universal Journal of Educational Research*, 3(1), 24–31. <https://doi.org/10.13189/ujer.2015.030104>



- Suryasa, I. W. (2017). An Analysis of Students ' Motivation Toward English Learning As Second Language Among Students In Pritchard English Academy (PEACE). Journal of Social Science and Humanities, 1(2), 43–50.
- Vibulphol, J. (2016). Students ' Motivation and Learning and Teachers ' Motivational Strategies in English Classrooms in Thailand. English Language Teaching, 9(4), 64–75. <https://doi.org/10.5539/elt.v9n4p64>