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The Development of E-Module English Specific Purpose based on Computer Application for Vocational High School Students

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Abstract. The development of E-Module English Specific Purpose based on computer application is carried out in the development stage based on the Four-D Model. There are define, design, develop and disseminate. The E-module application developed aims to be accessible to teachers and students. It is designed attractively and innovatively because it is equipped with images, learning animations, audio learning, and exercises that can immediately feedback (answers) instantly; this module provides simulations for students about the use of computer applications. The practical test of e-module application is used to determine the practicality of using e-modules computer application by users. This test was carried out by e-module computer application users, namely students and teachers in three selected schools, which consisted of: 75 students and 3 English language teachers. The practicality test results show that the practicality score for the use of e-module computer application is 76.4%.

Keyword: Application, E-Module, English Specific Purpose, Define, Design, Develop, Disseminate

1. Introduction

For English language skills are an important component of economic competitiveness, both at the individual and national levels. Free trade between countries makes economic actors access the world market, so that competition between countries in the trade arena becomes higher. This requires a country to have human resources with capable English skills, including Indonesia.

However, the results of EF's (Education First) research in 2016 regarding English language skills showed that Indonesia was ranked 32nd out of 72 countries studied with a score of 52.94 or in the middle ability level category. This score is lower than the other 3 ASEAN countries, namely Singapore 6th (score 63.52 with very high ability level), Malaysia 12th place (score 60.70 with high ability level), and Philippines 13th place (score 60.33 with a very high ability level)

Even the score of Indonesian English ability is lower than Vietnam which is 1 level above Indonesia or ranked 31st (score 54.06). This proves that the need for hard work from various parties to



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increase the level of English language skills of the Indonesian population is at least a high category level.

In addition, major academic fields such as mathematics, literacy, and English are very important skills and are recognized with high demand, graduates of Vocational Schools (SMK) need to get life skills (critical thinking and problem solving), behavioural skills (communication, organization, working in teams, and leadership), as well as computer skills which are all basic skills required to innovate and increase economic knowledge (OECD 2015).

The results of EF (Education First) (2006) also show that English has become a core skill. Therefore, English should be taught and tested at a level equivalent to reading skills in mother tongue and mathematics. Given the growing importance of English in the last 20 years, strong knowledge of this language will become increasingly important as teenagers enter the workforce at this time.

However, until now, English is still considered a student as a subject that is difficult to learn. English is still a frightening scourge for most students in Indonesia. Meanwhile, students receive the same amount and content of English language lessons each year. They are also taught by teachers who have the same qualifications and curriculum structure.

According to Sumarmi (2011) during this time learning English in Vocational Schools was taught with conventional methods. Conventional learning is learning that is more teacher-centered and prioritizes effective learning strategies to expand the information on teaching materials. The learning process, especially English, still uses makeshift media, not infrequently only is using text and student worksheets with minimal practice. This is one of the causes of students' lack of interest in learning English which has an impact on their low English language skills.

Meanwhile, English for Specific Purpose (ESP) focuses on developing English language communication skills in specific disciplines, such as learning English for academic purposes and needs. However, in practice, ESP is not used in schools, especially Vocational Schools. In fact, ESP can improve students' English skills. Therefore, this ESP needs to be used in English learning. With the English Specific Purpose (ESP) e-module in English subjects, it is expected that teachers and students can use it in the teaching and learning process of English at school.

The English Specific Purpose (ESP) E-module on English subjects that will be designed is expected to attract students' interest in learning English. This E-module is designed attractively and innovatively because it is equipped with 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, this e-module is also expected to facilitate teachers in teaching English lessons because this e-module will streamline the teacher's time to manually correct the exercises given to students. So teachers can use the efficient time to improve the quality of learning, for example doing classroom action research, etc.

Based on the above conditions, the research entitled "Effectiveness of the Application of English Specific Purpose (ESP) E-module to Increase Interest in Vocational High School Audio Visual Students in English Subjects" needs to be done to find out whether the English Specific Purpose (ESP) e-module what will be designed and implemented can improve students' interest and ability in English.

2. Riview of Literature

2.1 Student Interests and Learning Outcomes in English Language Subjects

The 2016 EF (Education First) research shows that English is the key to the economic development of a country. English proficiency is positively related to National Net Income per capita of a country. Increased English proficiency is related to salary increases, which can then make governments and individuals invest more in English language training. In many countries, higher English proficiency is associated with low unemployment rates among young people. Quality of life indexes, such as the Human Development Index is also positively correlated with EF EPI. The Human Development Index measures educational attainment, life expectancy, literacy rates, and living standards. Some countries have low or medium English proficiency and a high level of development.

Learning interest is basically a mental state or mental condition that becomes the driving force in achieving a particular goal, in this case, the learning objectives. The starting point in successful teaching is to arouse students' interest in learning through stimuli and stimuli in order to trigger and maintain their interest in learning. Basically, the interest in learning has been inherent in students, but the role of the teacher is very large in maintaining and arousing interest in learning, providing a stimulus so that the interest in learning is high. Learning interest is influenced by two factors, namely, internal factors (in students) and external factors (outside students). Looking at these factors, these external factors are of particular concern from the role of a teacher in providing a positive influence in maintaining and triggering students' interest in learning in addition to parents and the surrounding social environment (Ardhisan 2014).

The results of student interviews conducted at Muhammadiyah 1 Surakarta Senior High School showed that almost all students lacked interest in English subjects both male and female so that student achievement under the KKM 75.00. In addition, the lack of students' interest in learning English and completing tasks is feeling lazy, bored, bored, unable to work, and more interested in doing the fun they have. Low student interest in English language learning is caused by various factors and constraints. Factors that can influence students' interest in learning include students themselves, learning facilities, teacher abilities, average students' low ability, students not responsible for tasks, and often English is still considered too difficult (Hartono 2016).

2.2 English for Specific Purposes

The English for Specific Purpose (ESP) term emerged in the 1960s because of the awareness of learners or entrepreneurs that English language courses alone could not meet needs. The rapid development of English in various fields such as business, media technology, medicine, education, and research, makes ESP's demand even higher especially in countries where English is used as an instrumental goal. In some countries like Albania learn English to meet curriculum requirements, for Standard English language proficiency tests, or to get a promotion at work (Bracaj 2014).

English for Specific Purpose (ESP) focuses on developing English language communication skills in specific disciplines, such as finance, marketing, management, human resources, engineering, and strategic thinking. Broadly speaking, ESP is divided into two, namely EAP (English for Academic Purposes) and EOP (English for Occupational Purposes). If the purpose of EAP is to learn English for academic purposes and needs, then EOP is learning English for work goals and needs and training. In addition, ESP is basically built on the basis of EGP (English for General Purposes) and is designed to prepare English language learners used in certain disciplines and occupations in order to achieve certain goals (Bojovic 2016).

In general, students learn English not because they are interested in English or the culture of English itself, but because they need English for study or work purposes. In ESP, English is learned not only for its own sake or for general education, but to facilitate entry or efficiency in a larger linguistic environment in the academic, professional, or work environment (Lamri 2016).

3. Method of Research

3.1 Population, Sample Research, and How to Withdraw Sample

Population is a collection of all individuals whose survey must be exploited (Lemeshow, 1990). The population in this study were all Vocational High Schools (SMK) in Padang City and Pariaman who had Audio Visual majors.

Sampling is done purposively with the provision that the Vocational School has an Audio Visual major. After the data was requested from the Provincial Education Office, three schools with Audio Visual majors were obtained and were willing to be used as research sites, namely: SMK 1 Padang, SMK 4 Padang, and SMK 4 Kota Pariaman. The examples in this study were teachers and students in the three selected schools, which consisted of class X students who were the subject of experimentation and control students (who were not subject to experiment).

3.2 Research Stages and Module Development Models ⁴

According to Sugiyono (2006) development research ⁴ is a research used to produce and measure the effectiveness of certain products. Based on this, the development model of English Specific Purpose (ESP) e-module on English subjects uses Four-D Model by Thiagarajan, S., Semmel, D. S & Semmel, M. I (1974). This model consists of 4 stages of development, namely Define, Design, Development, and Disseminate.

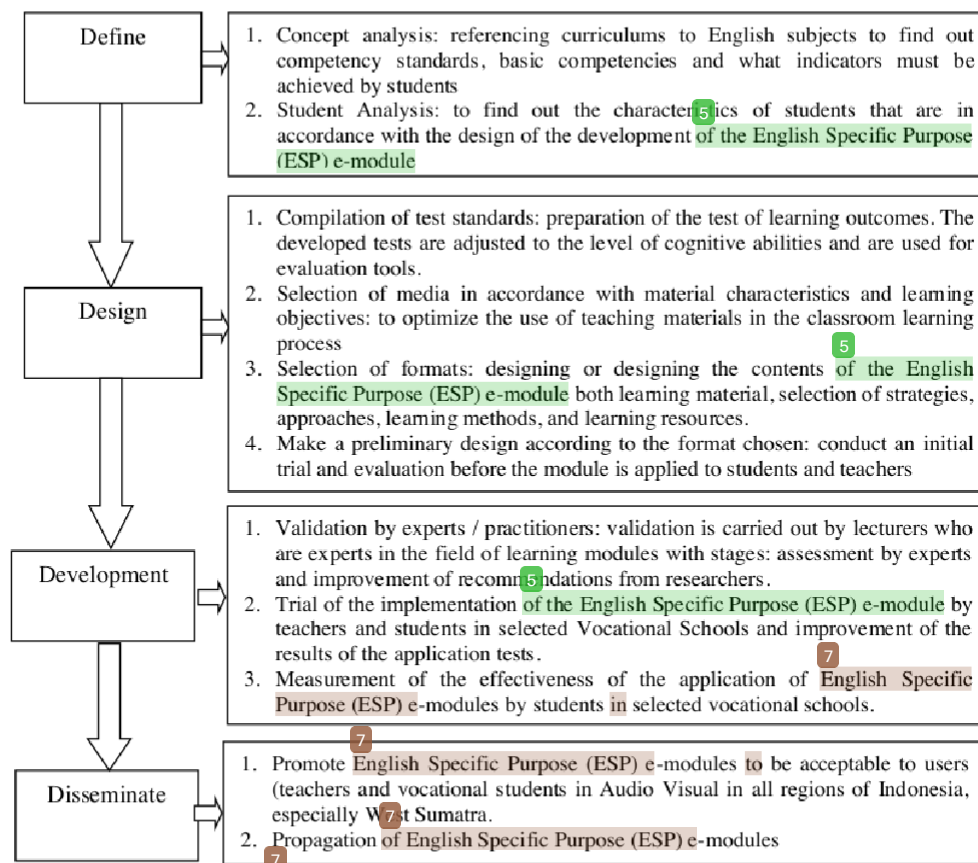


Figure 1. English Specific Purpose Development E-module Stages

4. Result of Research

4.1 Design and Display of the Use of E-Modules

The E-module that was developed aims to be accessed by teachers and students. Therefore, to facilitate the teacher in accessing this e-module, a procedure for use was made. The following are the procedures for using and displaying the results of using e-modules.

a. The ESP E-module Display Form

1. Open the E-MODUL ESP folder on the local Disk. 2. Double click on the E-module program

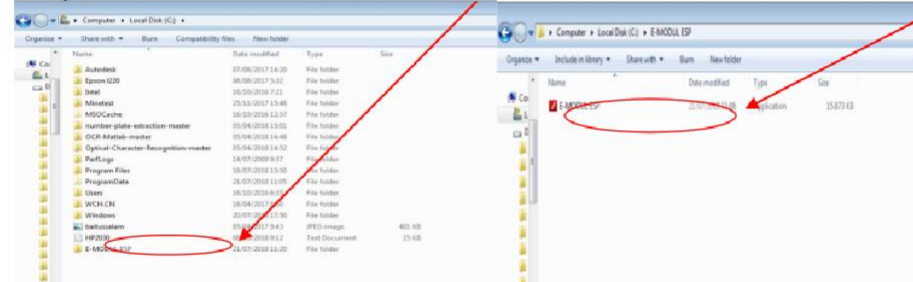


Figure 2. Location of E-Modul ESP

Then the display will appear as below.



Figure 3. Display of E-Modul ESP

2. Click the "Start" button

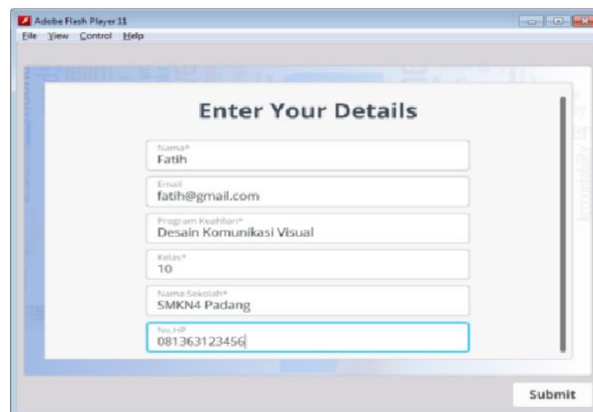


Figure 4. Display of E-Modul ESP after Click the Start Button

b. Display of Results of Using E-Modules

Images of print out e-mails received from participants can be seen in the following picture. In the email the teacher can see in detail the answers from the participants.

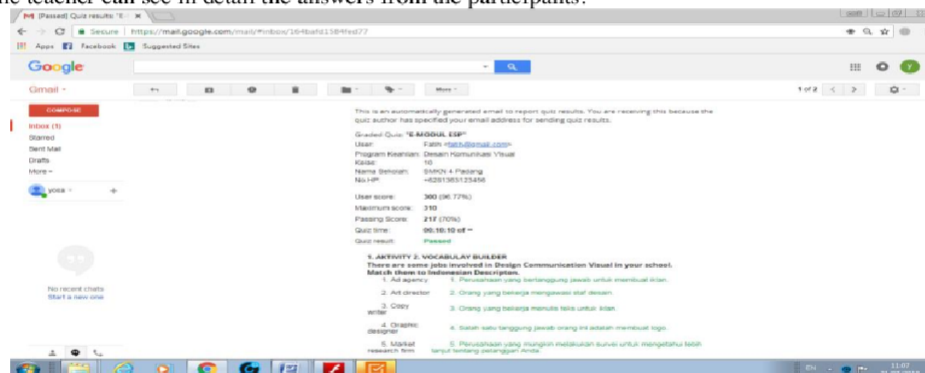


Figure 5. Result of E-Module ESP

4.2 Validity Test Results

Validity tests were conducted to assess the English Specific Purpose (ESP) e-module design. The validator in this study was one English lecturer from Andalas University and one student from the Information Systems University of Putra Indonesia. The validator provides an assessment, input and commentary on the ESP e-module design.

The results of the ESP e-module validation test were carried out through 4 aspects, namely: Physical Quality / Display, Material Quality, Quality of Purpose and Role, and Instructional Quality. Validation test results show that overall ESP e-modules are very valid for use by students and teachers with a score of 89.5%. This is seen in all aspects assessed, namely: Physical Quality / Display with a score of 90.5% (very valid), Material Quality with a score of 87.5% (very valid), Quality of Goals and Roles with a score of 94, 4% (very valid), and Instructional Quality with a score of 85.7% (very valid).

Table 1. Average Score of E-Module Validity Test Results by Experts

No	Aspect	Validity Test Results by Experts	
		Score (%)	Category
1	Physical Quality / Display	90,5	Very Valid
2	Material Quality	87,5	Very Valid
3	Quality of Goals and Roles	94,4	Very Valid
4	Instructional Quality	85,7	VeryValid
	average	89,5	Very Valid

4.3 E-module Pratikalitas Test

Practical test e-module is used to determine the practicality of using e-modules by users. This test was carried out by e-module users, namely student and teachers in three selected schools, consisting of: 75 students and 3 teachers of English subjects. The results of the practicality test showed that the practicality score of using the English Specific Purpose e-module was 76.4%. This means that e-modules are very practical to be used by teachers and students, both in terms of ease of use, material and media.

Table 2. Average Score of E-Module Practicality Test Results by Teachers and Students

No	Aspect	Score (%)	Category
1	Ease of Use	78,0	Very practical
2	Material	77,2	Very practical
3	Media	74,1	Practical
average		76,4	Very practical

a. Practicality Test Results by the Teacher

Practicality tests by the teacher are assessed based on three aspects, namely: (1) Aspects of Ease of Use; (2) Material Aspects; (3) Media Aspects. The results of the practicality test showed that based on the teacher assessment, the English Specific Purpose e-module was very practical to use with a total score of 79.8%. This is shown from the practicality assessment on aspects of use (score 81.0%), material aspects (83.3%), and media aspects (75.0%).

Table 3. Score of E-Module Practicality Test Results by the Teacher

No	Aspect	Teacher	
		Score (%)	Category
1	Ease of Use	81,0	Very practical
2	Material	83,3	Very practical
3	Media	75,0	Very practical
average		79,8	Very practical

b. Practicality Test Results by the Student

As with teachers, practicality tests by students are also assessed based on three aspects, namely: (1) Aspects of Ease of Use; (2) Material Aspects; (3) Media Aspects. Practicality test results by students show that this English Specific Purpose e-module is practically used with a total score of 73.1%. This is shown from the practicality assessment on aspects of use (score 75%), material aspects (71.0%), and media aspects (73.2%).

Table 4. Score of E-Module Practicality Test Results by the Student

No	Aspect	Student	
		Score (%)	Category
1	Ease of Use	75,0	Very practical
2	Material	71,0	Practical
3	Media	73,2	Practical
average		73,1	Practical

5. Conclusion

5.1 Conclusion

The conclusions of the results of the research have been carried out, as follows:

1. The ESP e-module validation test results are carried out through 4 aspects, namely: Physical Quality / Display, Material Quality, Quality of Purpose and Role, and Instructional Quality. Validation test results show that overall ESP e-modules are very valid for use by students and teachers with a score of 89.5%. This means that this ESP e-module is very valid to be used by both students and teachers

2. The results of the practicality test showed that the practicality score of using the English Specific Purpose e-module was 76.4%. This means that e-modules are practically used by teachers and students, both in terms of ease of use, material, and media.

5.2 Recommendation

As for suggestions from the results of this study, as follows:

1. Seeing the enthusiasm of the teacher and students towards the module in assisting the learning of English, this module should be developed, especially the modules made in each lesson chapter
2. Since this module cannot be accessed on smart phones, further research is needed to develop this e-module into an application that can be downloaded and used on smart phones, so the use of modules can be accessed anywhere and anytime by students and teachers.

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