

Developing Electronic Student English Workbook for Senior High School in Indonesia

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Abstract

This Research and Development (R&D) study has a purpose of developing E-UKBM (Unit Kegiatan Belajar Mandiri Elektronik) for senior high school in Indonesia. The product developed in this study was in the form of English courseware intended for both independent study and classroom use based on the 2013 curriculum. This study adapted the research and development model developed by Borg and Gall. It involves of 7 stages, namely: (1) need analysis, (2) product development, (3) product validation, (4) product revision, (5) product try-out, (6) final revision, and (7) final product. The instruments used are questionnaires for students and teacher, notes on document study, validation checklist for media and curriculum expert and also a checklist for students in the product try-out stage. The result of the product validation showed that the product was considered valid with the score 98% from the media expert and 100% from curriculum expert. The revision of layout and screen resolution was made based on the validators' feedback. Moreover, the results of the try-out showed that the product was considered acceptable, with a score of 94%. The final product of the study is in the form of English learning courseware. The courseware consists of three chapters, and each chapter was classified into three sections, namely pre-activity, whilst-activity, and post-activity.

Keywords: E-UKBM, English, Courseware, Senior High School.

INTRODUCTION

Nowadays the development of Information and Technology (IT), especially for the computer, is impressive. The spread of that development almost reaches human life. Consequently, a school in this modern era is required to adapt to these changes in the teaching and learning process. During the last few years, the education system in Indonesia changes many times. Since 2015, the government decided to massively implement SKS (*Sistem Kredit Semester*) to junior high and senior high schools in Indonesia (Kemdikbud, 2014). The SKS allows students to learn to complete education in junior and senior high school based on their own learning pace. Besides, the teachers

are also required to develop UKBM (*Unit Kegiatan Belajar Mandiri*) as supplementary materials for students to learn individually at school/home (Kemdikbud, 2017). However, up to now, there have been many issues faced by schools that implement the SKS system. Starting from the school facilities, the quality of the teachers, the learning materials and media, and others. Such difficulties are also experienced by SMAN 1 Situbondo. It is one of the schools in Indonesia that has been implementing the SKS system since 2017. First, based on the preliminary study, it was found that the school, especially the teachers, need to develop UKBM (*Unit Kegiatan Belajar Mandiri*) for the requirements for a school to implement SKS system. The teachers imply that they are overwhelmed with that task because they need to develop UKBM for each chapter and need to review students work on the UKBM itself. Besides, it was also found that some students do not keen on the UKBM because they need to copy UKBM from the schools and it cost much money, according to them.

Not only that, they often feel bored in doing the tasks in UKBM because they are not exciting and since it is photocopiable-quality, the quality of the pictures in the UKBM is not so good, making the boredom becomes worse than before. Consequently, it affects students' character and performance in the class. Furthermore, some students often lose UKBM or forget to bring UKBM to school, which affects the teaching and learning process in the classroom. Therefore, an attractive, interactive, and flexible UKBM is needed to solve that problem. This study employed some theories to develop such engaging, interactive, and flexible UKBM. They are about Computer Assisted Language Learning (CALL), multimedia for language learning, Task-Based Language Teaching (TBLT), autonomous learning, and self- assessment.

Nowadays, with the rapid development of technology, the world of language teaching and learning has entered a new era. It is called Computer Assisted Language Learning (CALL). Levy (1997) defined CALL as "the search for and study of applications of the computer in language teaching and learning." CALL covers many different types of software applications. Based on the purpose, the applications tend to fall into two distinct types: (1) generic software applications, and (2) CALL software applications. The generic software applications are usually designed for general use such as word processing software, presentation software, Computer-Mediated Communication (CMC) applications, Web browsers and Web 2.0 applications.

In another side, CALL software applications are usually designed to promote explicit or implied language learning objectives such as listening courseware, digital reading book, vocabulary flash game, and others. Therefore, it is possible to deliver an exciting and interactive CALL software application to assist students' language learning by developing courseware which was defined by Parrott & Kok (1997) as "instructional material delivered in electronic format."

Besides, Pun (2013) also mentions that the use of multimedia technology motivates the students to learn English quickly and effectively. The consideration of applying multimedia in EFL learners' classroom is building on the attractiveness and interactivity for them. The attractiveness of this multimedia comes from performed display, pictures, sound, and animations. Meanwhile, the interactivity of it derives from the interaction between learners and utilized multimedia which provides much information, answers, and exercises for learners.

Task-Based Language Teaching (TBLT) is an approach to language teaching that provides opportunities for students to engage in the authentic use of the target language through tasks. Students learn a language and develop skills as they work toward completing the task, which motivates them to stretch their available language resources (Ellis, 2003). Besides, he also emphasizes that TBLT is flexible enough to fit into different curricula and different teaching contexts. It can also be used to different degrees. Individual tasks can support a course, or tasks can build an entire program. Not only that, but Ellis (2003) also emphasizes that TBLT is flexible enough to fit into different curricula and different teaching contexts. In addition to being adaptable, task-based language teaching is a student-centred approach to teaching (Van den Branden, 2012).

Autonomous learner or learner autonomy is defined in various terms by many researchers. Holec (1981), for example, defines autonomy as "the ability to take charge of one's learning". Meanwhile, Dickinson (1995) explains that autonomous learning is known to not only allow learners to cater the learning content and speed to their own needs but also to motivate learning, and thus to lead them to higher language learning.

Autonomy learning has merits if it is compared to a traditional class. According to some studies by Long, PaoNan, and Wei-Fan (in Francis and Flanigan, 2012), autonomy learning shows a positive correlation with students' achievement. The advantages of autonomy learning are: (1) giving the same opportunities for a different level of students; (2) encouraging students' confidence and responsibility; (3) focusing the students' attention. These strengths focus on individual learning.

Self-assessment is defined as the tool to assess students' comprehension by involving them in the process of evaluation. It has been popular since the 1990s since it was considered as a tool for assisting learners (Kato, 2009). Moreover, by using self-assessment in their learning process, language learners will have some responsibility in locating their strengths and weaknesses (Harris, 1997).

There are quite a few relevant studies on developing multimedia-based English learning material. A study by Raharja (2016) on "Developing English Learning Materials for the Eleventh Graders of Multimedia Study Program at SMKN 2 Sewon in the First Semester of the Academic Year of 2015/2016" showed that the developed English

learning materials were appropriate to be implemented for Grade XI students of Vocational High School (SMK). The result of the materials evaluation showed that the materials felt into "Good" category.

Moreover, Wijaya (2016) also conducted a similar study on "Developing Interactive Multimedia for Teaching Reading to Grade VIII Students of SMPN 2 Mertoyudan in The First Semester" implied that the use of computers is considered as an effective way to involve multimedia features.

Therefore, this study aimed at developing interesting and interactive E-UKBM for the fifth-semester students at SMAN 1 Situbondo in the form of courseware that can be used independently by the students to improve their English skills as well as their motivation in learning English. The final product consists of courseware. The courseware is in the form of interactive computer application (.exe) which can be played on any computer using CD/DVD/USB with Windows Operating System.

The product consists of three chapters. In each chapter, the learning activities are divided into three stages. They are pre-activities, whilst-activities, and post-activities. All of the contents for the learning material are based on the current Curriculum of 2013 for English lesson in the fifth semester of senior high school. Besides, the product also incorporates many kinds of media, including texts, pictures, videos, and audios.

METHOD

In this research, the researcher adapted the Research and Development (R&D) model by Borg and Gall (1983). The original procedures consist of 9 stages, namely: (1) Needs Assessment, (2) Planning, (3) Developing prototype of the product (4) Small scale field-testing, (5) Main product revision (6) Large Scale field-testing, (7) Operational product revision, (8) Operational field-testing, and (9) Final product revision.

The modified procedures consist of seven stages. First, a needs analysis is concluded to identify students' problems and needs related to learning English with UKBM in School with SKS system. Next, the researcher starts developing the product based on the data obtained from the need analysis. After that, the product is validated by the experts to make sure the product is appropriate and ready to be tried-out. The next step is product revision based on the comments/ feedback from the experts. Then, the product is tried-out in the classroom by students. After that, the product is revised again based on the results of try-out. Finally, the product is published.

Needs analysis was conducted to find out classroom problems and needs related to learning materials in the fifth-semester students of SMAN 1 Situbondo, especially related to UKBM (Unit Kegiatan Belajar Mandiri). Therefore, the researcher used two kinds of instruments in this stage to collect data from the teacher and the students. The

first instrument was the students' questionnaire, targeted to students while the second was the teacher's questionnaire which was for the teacher.

The data collection process during the need analysis went as follows. First, questionnaires were given to the students to find out their problems in learning English in the class especially while using UKBM, activities and media used by the teacher in the class, and their suggestions toward E-UKBM that were going to be developed. After that, the researcher asked the teacher to fill out the teacher's questionnaire. Moreover, the researcher also studied the 2013 Curriculum framework for fifth-semester senior high school students to identify the core competences and basic competences for the fifth-semester senior high school students. The data obtained from the students' questionnaire were analyzed quantitatively using tally marks, table of frequency, and percentage.

Based on the information obtained from the need analysis, the researcher began to develop the product in the form of E-UKBM which contain appropriate learning materials that the students could use independently and a program guide on how to use the program. The development of the product adopted a task-based approach (Nunan, 2004) in which the process of learning was acquired through meaningful tasks and activities.

Furthermore, in developing the product, the researcher also adapted courseware development steps proposed by Alessi and Trollip (1991). The steps are determining the materials, collecting resources, and designing the courseware. First, the researcher identified and mapped out the core competences and basic competences to be included in the product. Then, the contents of the materials were decided according to the core competences and basic competences in the Curriculum 2013 for the senior high school students who are in the first semester. There were three topics in the fifth semester in senior high school. They were (1) "How can I help you?", (2) "Creating Caption ", and (3) "Do You Know How to Apply for a Job?".

After all of the needed materials had been collected, the next step was designing the E-UKBM. This step includes designing the layout and inserting the material into the courseware. The researcher decides to make the courseware in the form of interactive courseware. The program used in making this courseware was Lectora Inspire 18. In developing the exercises, the researcher adapted the three phases from the task-based approach. Those phases are Pre-task, During-task, and Post-task (Ellis, 2003). Those phases were later translated into pre-activity, main activity, and post-activity in the E-UKBM. In the process of making the exercises and activities, the researcher incorporated quiz feature in Lectora Inspire 18. This feature allowed the researcher to create a variety of interactive exercise completed with an automatic scoring system and feedback. The researcher chose the type of exercise, inserted the questions and also

the key answers to the courseware. In producing supporting materials, in this case, was the program's manual, the researcher took some screenshots on how to use the E-UKBM and added instructions and explanations on steps of how to use the E-UKBM.

In the next stage, the product was validated by the experts to determine whether or not it was valid and ready to be tried-out. The researcher asked two experts to validate the product. The first expert was an expert in the electronic media, and the second expert was an which was expert in the Curriculum.

The product validation checklist was used to obtain data in this process. The checklist for electronic media expert covered some aspects, namely: (1) the layout and the design of the product, (2) the media presented in the product, and (3) the program's manual. The data obtained from the media expert's checklist were then analyzed quantitatively using simple statistics by giving a score to each criterion based on the scoring guide. After that, the total score was calculated and then divided by the maximum score to get the final score of the product. Then, it was converted into percentage and compared to the product validity criteria adapted from Arikunto (2006) to determine the validity of the product.

Furthermore, the checklist for curriculum expert was adapted from the UKBM checklist by Kemendikbud (2017), and it covered some aspects, namely: (1) the component of UKBM, (2) the completed aspects of UKBM, (3) the learning process of UKBM and (4) the learning activity of UKBM. The data obtained from the curriculum expert checklist were analyzed quantitatively using simple statistics by giving a score to each criterion based on the scoring guide adapted from Kemendikbud (2017). Then, the total score was calculated and then divided by the maximum score to get the final score of the product. Then, it was converted into percentage and compared to the product validity criteria adapted from Kemendikbud (2017) to determine the validity of the product.

After it had been validated, the researcher worked to revise the product based on the comments, suggestions, and feedback from the experts. Then, the product went on to the next step, which was the product try-out. The product needed to be tried out to know the acceptability, strengths, and weaknesses of the product. In this stage, the researcher involved 31 students of XII-IBB who are in the fifth semester. First, the students were required to do all activities in each chapter of the product. Then, at the end of the try-out, they were required to complete the students' checklist given by the researcher. The checklist covered some aspects, namely (1) The material, (2) The Language, (3) The Design, (4) The Activities, (5) The Video and Audio Quality, and (6) The program's manual. From those aspects, 15 criteria were developed and included in the checklist in the form of statements. The data obtained from the students' checklist were analyzed statistically by using tally marks and a frequency table. The frequency of

students' response in each criterion was then converted into a percentage. After that, the number of percentages of students' positive response (student who responded agree or very agree) in each criterion was calculated. Next, the average positive responses from all criteria were calculated to get the final score. Last, the final score of the product was compared to the criteria of product acceptability adapted from Arikunto (2006) to know whether the product was acceptable or not. Besides, the information obtained from the observation notes were described descriptively.

The final revision of the product was conducted based on the results, feedbacks and comments from the try-out stage. Finally, after the product was revised based on the results from the try-out stage, the final product, which was in the form of E-UKBM, was ready to be used by students in the classroom activity independently or in the class guided by the teacher.

RESULTS

The Results of Need Analysis

The student's questionnaire was distributed to 31 students of class XII-IBB at SMAN 1 Situbondo. They contained ten questions related to; (1) the school system (SKS), (2) the use of UKBM, (3) the students' problems in learning English in the class especially while using UKBM, (4) activities and media used by the teacher in the class, (5) their suggestions toward E-UKBM that are going to be developed and (6) students' preference of material and task used in the E-UKBM. The result of the questionnaires revealed that the students need E-UKBM, although 85% of students said they were satisfied with the quality of the currently used UKBM. It can be seen because of the problems they have experienced in using UKBM in the 11th and 10th grade. Some of the problems are unclear instructions, text, picture, confusing vocabulary, and lack of varied activities.

From the document study of core competence and basic competences analysis in the fifth semester, the researcher identified the materials to be included; they were: (a) offering services, (b) job application letter, and (e) caption. It is also revealed from the questionnaire that they preferred to have more interesting learning materials in their E-UKBM, such as (1) Video/Animation/Picture (43%), (2) Audio/Songs topic (31%), (4) Reading Text (26%).

Related to the students' preference on the types of learning activities in the E-UKBM, multiple-choice was found to be the most preferable with the percentage of 30% followed by true/false with the percentage of 22%, matching and then short essay with the percentage of 18% and 10%. In contrast, arranging sentences was found to be the least favourable, with a percentage of 6%.

From the results of the teacher's questionnaire and it is evident that the school is implementing an SKS system which requires the teacher to use UKBM as part of students' learning both inside and outside the classroom. Moreover, it was also found that the teacher had to develop UKBM for all basic competences in the class they taught because the government did not provide UKBMs.

Besides, it was also can be known that there is no English UKBM available for 12th-grade students yet. This fact is worsened by the problems experiencing by the teacher when they use UKBM in the 11th-grade students or 10th-grade students. The most common problems are that the students often forget to bring UKBM to the school, prohibiting their learning in the classroom. Another problem found by the teacher is that the students often felt uncomfortable in doing the UKBMs because of the low quality of the copy of the UKBM. The pictures are often not clear, and the sentences are sometimes not readable. Therefore, based on the teacher questionnaire, the teacher suggested developing UKBM in the electronic format to overcome those problems.

Besides, the teacher also recommended having a variety of activities in the E-UKBM for 12th graders such as multiple-choice, gap filling, true/false and matching so that the students will not get bored in doing UKBM. He also added that it would be good if there are some interesting materials such as video/film, songs, and dialogue recording.

The Results of Product Development

Based on the result of needs analysis, the researcher decided to choose three materials, and they are about; (a) offering help and services, (b) giving job application letter, and (c) creating captions. Those materials were chosen due to its relevance to the curriculum, the availability of learning resources, the limited time of the study, the teacher's suggestions, the usefulness of the material, and the relevance to the student's daily lives.

After deciding the materials, the researcher then collected the needed resources for developing the product. The researcher browsed the Internet for learning materials. The researcher searched for videos that were appropriate with the basic competence chosen by entering some keywords like "Offering Help", "Offering Services.", and others. After that, the researcher downloaded some suitable videos to his computer.

In addition to videos, another type of material used in the E-UKBM courseware is in the form of pictures. The researcher browsed the internet for some pictures related to the materials as main materials as well as complementary illustrations by entering some keywords like "Offering Help", "Offering Services.", "Job Application Letter", "Captions", etc. Moreover, the researcher also browsed for learning materials and

activities on the Internet as well as develop them. Some activities chosen to be included in the E-UKBM are multiple-choice, short answer, and matching.

In developing the courseware, the researchers used Lectora Inspire 18 to make the activity and the animations. The researcher included both pictures and videos that have been downloaded and selected. Moreover, pre-activity, whilst-activity, and post-activity were also added. The objective of pre-activity is to introduce them to the topic and brainstorm their knowledge to the topic. The whilst-activity is intended for students to do the main activities and exercise. Last, the objective of post-activity is to review, evaluate, and reflect what the students have learnt.

The E-UKBM is also completed with automatic scoring feature based on the answer key entered in the program. After finishing developing the courseware, the design was then exported into executable (.exe) format so that it can be operated on students' computer. The layout of the courseware can be seen in Figure 1 to Figure 3.

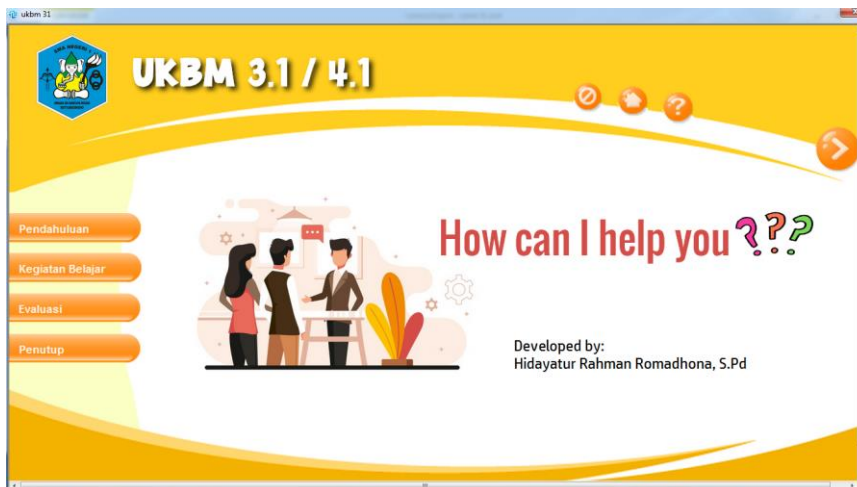


Fig.1 - The Front Page of the E-UKBM

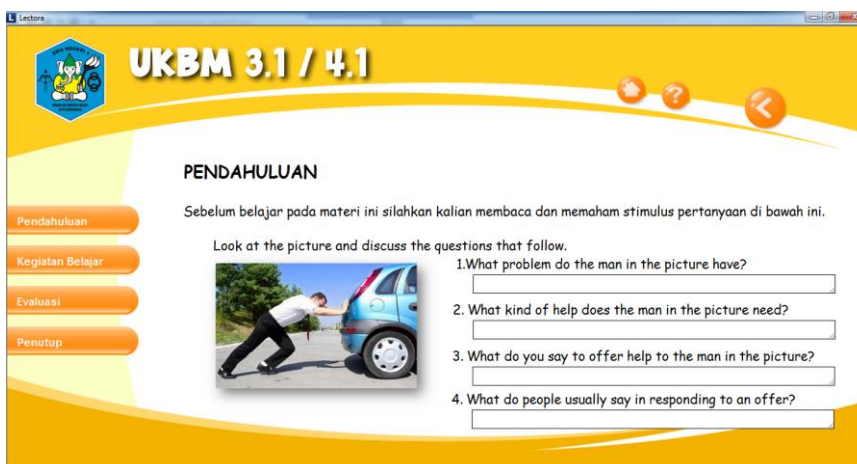


Fig.2 - The Example of Pre-Activity in the E-UKBM.

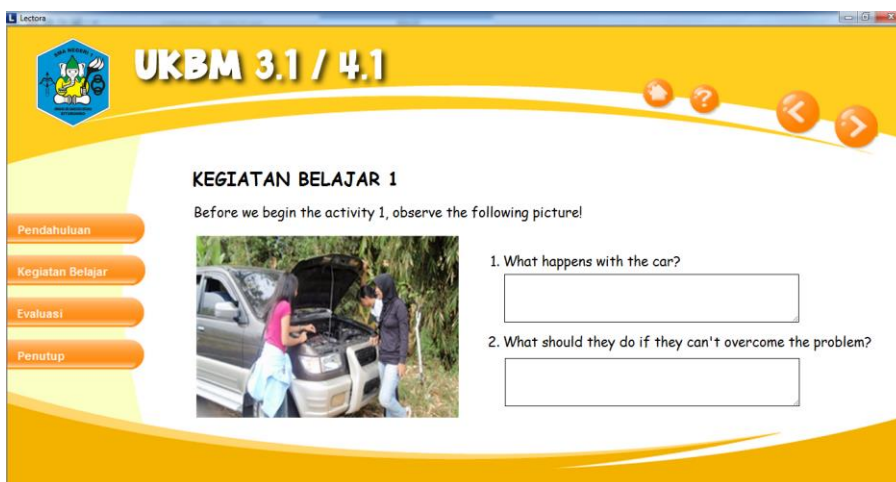


Fig.3 - The Example of Whilst-Activity in the E-UKBM

The Results of Product Validation

From the media expert validation, almost all aspects of the product were marked as excellent. Only 1 out of 13 criteria was stated as good instead of excellent. It was stated that minor revision needed in term of the layout and user interface of the E-UKBM. He suggested that some buttons needed to be changed and the resolution of the E-UKBM should be adjusted to more appropriate with the resolution of the students' laptop. In term of product validity based on the media expert's checklist analysis, the final score of the product obtained in the expert validation was 98%. Therefore, the product was considered valid and ready to be tried-out. From the curriculum expert validation, the teacher marked all criteria as excellent. In term of product validity based on the curriculum expert checklist analysis, the product was also considered valid since the final score of the product obtained from the teacher validation was 100%.

The Results of Product Revision

Based on the product validation stage, in general, there were only two kinds of revisions needed to be done with the product. They are the layout and the resolution of the E-UKBM. The first revision was done with the layout. The researcher moved the position of the exit button in the front page to the last page of the -UKBM. It was necessary based on the media expert comment since it can sometimes make students click exit button accidentally. The revision had to be done for all chapters of the E-UKBM. The example of the revision can be seen in Figure 4.

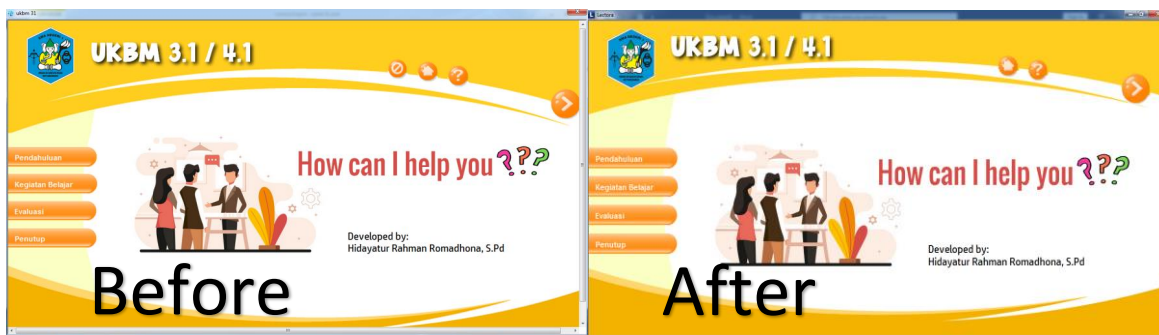


Fig.4 - The Example of Layout and Design Revision in the E-UKBM

Furthermore, regarding the revision of the resolution of the E-UKBM, the researcher revised the resolution of the E-UKBM. In the original version, the resolution was set as 1366x786. However, due to the media expert, this caused the E-UKBM screen could not be appropriately displayed in students' laptop because there would be a scrolling system and it would make students feel quite uncomfortable in operating the E-UKBM. Therefore, the researcher decided to reduce the resolution to 1360x700 so that it would appear more appropriate in students' laptop screen.

The Results of Product Try-Out

During the try-out, the students were required to do all activities in all UKBMs. Then, at the end of each chapter, they were asked to complete students' checklist regarding the product. The data obtained from the students' checklist then were analyzed statistically using percentage to know the acceptability and the effectiveness of the product. The result can be seen in table 1.

Table 1 - The Result of Student's Checklist Analysis

No	Aspects	Statements	Students who responded "agree" and "strongly agree" in percentage (%)
1.			
	Materials	The materials presented can be understood.	97 %
2.		The materials are interesting.	100 %
3.		The materials help students to improve their English mastery.	86 %
4.	Language	The instructions in each task are clear.	93 %

No	Aspects	Statements	Students who responded “agree” and “strongly agree” in percentage (%)
5.	Design	The vocabulary used can be easily understood.	97 %
6.		The layout of the courseware is interesting.	93 %
7.		The pictures presented are interesting.	93 %
8.		The texts are clearly readable.	100 %
9.		The activities presented are varied.	90 %
10.	Activity	The difficulty level of activities is appropriate with students’ ability.	100 %
11.	Video and audio recording quality	Videos presented are clear.	87 %
12.		The audio recordings are clear.	87 %
13.		The audio recordings can be easily understood.	87 %
14.	Courseware’s manual	The courseware’s manual can be easily understood.	97 %
15		The courseware’s manual can be easily practiced.	100 %
Total average score of all criteria (%)			94 %

Overall, the product got 94% positive responses from the students. Besides, the product was considered acceptable by the students since the score was in the range of 76-100%.

Based on the observation notes made by the researcher during the try-out, these findings were found. Firstly, at the beginning of using the courseware, the students seemed to confuse on how to use it, although they have read the program manual. It was because the program manual itself uses English in the instructions. However, after the researcher helped them by demonstrating how to use the courseware in front of the class, they finally could understand.

Apart from those problems, in general, the product try-out run well. The students seemed to enjoy operating the courseware. They also discussed with their partners when the activity was about offering help to someone. Moreover, they seemed to have fun with the display, icons, and animations in the courseware. Besides, they listened and paid attention to the voice of the speaker in the recording. The students also did the tasks in the courseware enthusiastically.

The Results of Final Product

Based on the results of the product try-out, there were no significant revisions needed for the product since the product got 94% % in the overall score. The final product consists of reading, listening, speaking, and writing materials with a variety of exercises completed with self-assessment with an automatic scoring system and feedback that can be used as self-study English materials for the students. The content overview of the final product can be seen in Table 2.

Table 2 - The Content Overview of the Final Product

Chapter	Pre-Activity	Whilst-Activity	Post-Activity
Chapter 1 (How can I help you?)	Short Essays (4 questions) Type of Activities: Reading	Short Answer (2 questions) Type of Activities: Reading	Multiple Choice (10 questions) Type of Activities: Reading
		Fill in the blank (6 questions) Type of Activities: Reading	
		Dialogue Prompt (2 dialogues) Type of Activities: Speaking	
		Picture Prompt (12 pictures) Type of Activities: Speaking	
		Matching (1 question) Type of Activities: Vocabulary	
Chapter 2 (Job Application Letter)	Speaking Prompt (1 prompt) Type of Activities: Speaking	Short Answer (14 questions) Type of Activities: Reading	Multiple Choice (10 questions) Type of Activities: Reading
		Fill in the blanks (6 questions) Type of Activities: Listening	
		Writing Prompt (1 Prompt) Type of Activities: Writing	

Chapter	Pre-Activity	Whilst-Activity	Post-Activity
Chapter 3 (Writing Caption)	Short Essays (6 questions) Type of Activities: Reading	Short Answer (21 questions) Type of Activities: Reading Writing Prompt (1 Prompt) Type of Activities: Writing	Multiple Choice (5 Questions) Type of Activities: Reading

DISCUSSION

There are several points here that can be discussed related to the final product and its development. Firstly, the researcher conducted a needs analysis before developing the product. Therefore, the data obtained in that process became the primary source of information in developing the product. Every aspect of the product such as the content, the design, the materials, and the language was adjusted based on the currently used curriculum, teacher's suggestions, and more importantly the students' ability and interest.

One information that was taken is the choice of the format of the product. Based on the result of the teacher questionnaire in the needs analysis, the researcher decided to develop Unit Kegiatan Belajar Mandiri (UKBM) in electronic format (E-UKBM). This form is considered more suitable and more flexible for independent study materials both inside and outside the classroom compared to paper-based UKBM. The E-UKBM developed in this study is in the form of windows application (.exe). There are some advantages of the E-UKBM that can be discussed here.

First, it offers flexibility to the students in terms of time, place, and their style of learning. As stated by Kok & Parrott (1997) that by using courseware, "students can proceed at speed suited to their personal needs, which may vary between individuals, depending upon their abilities, motivational levels, and learning goals." It is in line with the SKS system implemented by the Indonesian government for Senior High School, which emphasize on the independent study of the students and their learning pace. The students can learn and practice their English skills independently using their laptop in the classroom or outside the classroom. Hence, the format would overcome the issue of flexibility and interactivity, as mentioned by the teacher and students in need analysis before.

Furthermore, as stated by Warschauer & Healey (1998) as in Flowerdew & Miller (2005), using computers in language education has some benefits such as bringing fun learning, offering practice with feedback, and accommodating a variety of exercises and styles of learning. In this case, the E-UKBM developed contains multimedia materials in the form of audio, video, texts, pictures, and animations to provide a fun and enjoyable

learning environment for students. Consequently, learning motivation will increase. It is proven in the observation during product try-out in which the students enjoyed using the E-UKBM. This finding is in line with Marshall (2002), who talks about the benefit of video materials to the increasing students' learning motivation and interest. Furthermore, Cahyono (1997) cited in Priajana (2011) says "Videos can be used as a motivating device since the action in the video is alive, so the learners do not get bored."

Besides, this E-UKBM also provides exercises as well as automatic scoring system and feedback features. These features are very essential in the autonomous learning because the scoring system provided by the program would provide more precise and practical scoring for the students and the feedback feature will help students in reviewing the materials they have learnt. It is in line with van der Kleij (2013) who stated that providing feedback for students in the computer-based learning will make it possible to fill the gap between what students know and what they are supposed to know.

Not only that, but the courseware also has "print the results" feature, which is very helpful for the teacher to monitor students' progress in autonomous learning. The students can print the result of their work and then discuss their work with the teacher in the classroom. Those features also will help the teacher in giving feedback to the students individually. Sadler (1989) and Stobart (2008) as cited in van der Kleij (2013) concluded that the result of the student's work in the computer-based learning is also crucial for the teacher to determine students' position in their learning process and to adapt teaching activities in the classroom to the actual needs of students. Besides that, Hiemstra (2011) also explained that in the self-directed learning environment, one of the teacher's role is the teacher helping the learner to engage in an evaluative process and assisting the learner in checking his progress toward specific goals. In short, even though the product uses technology and is intended to be used for self-study materials, it does not reduce the teacher's role in students' learning.

Last but not least, each chapter in the courseware is learnt through three stages in sequence. They are pre-activity, whilst-activity, and post-activity. This format offers an advantage, as stated by Flowerdew & Miller (2005) that this model will help students more focus on every part in the learning activities. Moreover, the variety of exercises in each chapter of the E-UKBM would strengthen students' understanding of the material and increase their participation.

Apart from the strengths and benefits, the product also has some issues. First, since the product is in the form of windows application (.exe), the users must have a computer or laptop with windows operating system. It cannot be used in macOS, Linux, or other operating systems.

Moreover, the system in the Lectora Inspire software which the researcher used to make the learning activities and exercises does not allow the researcher to place many exercises or activities for on the same page. Thus, students cannot do many exercises on the same page. This might be a little bit confusing for students to operate the courseware at the beginning like what happened at the try-out process. However, the availability of the program guide and teacher direction could help the issue. Besides, related to the difficulty level of the materials, although the students gave highly positive response toward the appropriateness of difficulty level, it seems that the appropriateness of the difficulty level of the materials with the students' level still can be improved, but further analysis is required.

CONCLUSION

The final product of this research was the multimedia-based self-learning module (E-UKBM). The findings from product validation and product try-out showed that the product had fulfilled students' need for interactive, interesting, and flexible E-UKBM. First, it offers flexibility to the students in terms of time, place, and their style of learning. The E-UKBM format (.exe) could overcome the issue of flexibility and interactivity, as mentioned by the teacher and the students in the need analysis before.

Consequently, learning motivation will increase. It is proven in the observation during product try-out in which the students enjoyed using the E-UKBM. Besides, this E-UKBM also provides exercises as well as automatic scoring system and feedback features.

Despite of its strength, the product also has some weaknesses. First, since the product is in the form of windows application (.exe), the users must have a computer or laptop with windows operating system. It cannot be used in macOS, Linux, or other operating systems. Moreover, the system in the Lectora Inspire software which the researcher used to make the learning activities and exercises does not allow the researcher to place many kinds of exercises or activities and it has also limited/restricted layout.

Based on the discussion, there were several suggestions addressed to the English teachers and further researchers who are interested in conducting a study in the same area. For English teachers, although the E-UKBM is primarily intended to be used in self-learning activities, the teachers should monitor the students' progress by using the "print results" feature available in the courseware or monitoring students when they are using the E-UKBM during the lesson in the classroom. Besides that, the teachers also can use E-UKBM for English learning activities in the class by integrating the E-UKBM with other activities or follow up activities.

Furthermore, since the product has a limitation in the layout design, it is recommended for further researchers to develop courseware that is more attractive,

interactive, and has more features. It would be better if further researchers use more advanced software in producing the courseware. The researcher recommended Adobe Flash Professional to produce Flash-based courseware because it offers more features and flexibility in creating multimedia-based content and application. Finally, it would be good if further researchers can use the courseware in the experimental research or classroom action research for the real use of the product in improving students' English skills.

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