

Developing an ICT Based Media of English Learning for Buddhist Students at Kusalamitra Homeschooling

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Abstract

This study was conducted at one of Buddhist Homeschooling namely Kusalamitra Homeschooling. This study aimed to develop an ICT based application to learn English for Buddhist students of Kusalamitra Homeschooling. This recent study was a research and development study so it objected to develop an English learning application for the students. Subjects of this study were validators and Buddhist students. There were two techniques used to collect the data namely interview and questionnaires. The interview was used to identify students' need in learning English. The questionnaires were used to validate the product and evaluate the product. The data collected were analyzed qualitatively and quantitatively. There were five procedures in conducting this study. Those were analyzing needs, designing product, developing product, implementing product, and evaluating product. Based on the research finding, this study showed that the media developed had very good quality and very worth to be implemented on the students.

Keywords: ICT; learning media development, English subject, Buddhist Students

Abstrak

Penelitian ini dilaksanakan di salah satu Homeschooling Buddha yang bernama Homeschooling Kusalamitra. Penelitian ini bertujuan untuk mengembangkan media pembelajaran bahasa Inggris berbasis teknologi informasi dan komunikasi. Penelitian ini merupakan jenis penelitian dan pengembangan yang bertujuan untuk mengembangkan sebuah aplikasi pembelajaran bahasa Inggris bagi siswa. Terdapat dua subjek dalam penelitian ini yaitu validator dan juga siswa Buddha homeschooling itu sendiri. Terdapat dua teknik yang digunakan untuk mengumpulkan data yaitu melalui wawancara dan penyebaran angket. Data yang dikumpulkan kemudian dianalisis secara kualitatif dan kuantitatif. Terdapat lima langkah dalam melaksanakan penelitian ini yaitu menganalisis kebutuhan, mendesain produk, mengembangkan produk, mengimplementasikan produk, dan mengevaluasi produk. Hasil penelitian menunjukkan bahwa media yang dikembangkan masuk dalam kategori sangat baik dan sangat layak untuk digunakan oleh siswa.

Kata Kunci: ICT; pengembangan media pembelajaran, mata pelajaran Bahasa Inggris, Siswa Buddha



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Introduction

Nowadays, Information and Communication Technology (ICT) has spread all over the world and in any fields. ICT is a technology used to process, compile, store, and manipulate data in some ways to get quality information such as relevant, accurate, and on time information.¹ This technology has spread to society quickly. It also gives some advantages for them. One of them is facilitating people to distribute information in this era of information society.² There are some supporting applications developed to make people's activities easier includes teaching and learning activity in education world. Consequently, teachers are required to master Information and Communication Technology so that they are able to develop ICT based learning materials. This aims to give wide opportunity for the students to learn the materials easily. This ICT based learning media gives alternative in delivering and presenting learning materials. Besides, it is also more interesting and fun for the students. However, the emergence of this ICT based media gives challenge for the teachers to master it well so that the media can be used effectively and efficiently.

The low ability of teacher to use ICT becomes the challenge that should be resolved to improve education quality.³ In this condition, teachers' professionalism is not only the ability in teaching but also ability in managing information and environment include learning place, method, media, and assessment to facilitate the students. Besides, the teachers also can become learning facilitator and can change learning models based on active role of the student.⁴ This causes every level of education both formal and informal schools need teachers and students who can implement information and technology in their teaching and learning process. One of institution which has senior high school level students is Kusalamitra Homeschooling. It is a Buddhist educational institution. It is also one of educational institution which also need to implement ICT in its teaching and learning process. There were some related researches about ICT development. The first one was Bahri et al in 2021 that studied about the developing of ICT media for History learning. They found out that learning local history using ICT based media could make students able to elaborate event in chronologically.⁵ The second research was from Hidayati and Ikasari in 2020 that researched about developing ICT media for calculus. They identified that ICT based learning media could be used as learning

¹ Cecep Abdul Cholik, "Perkembangan Teknologi Informasi Komunikasi / ICT Dalam Berbagai Bidang," *Jurnal Fakultas Teknik* 2, no. 2 (2021): 39-46.

² Hasyim Ali Imran, "Fenomena Perkembangan TIK, Strukturasi, Spasialisasi Dan Media Cetak ICT Development Phenomenon, Structuration, Spatialization And Print Media," *Jurnal Penelitian Pos Dan Informatika* 5, no. 2 (2015): 139-60, <https://doi.org/10.17933/jppi.2015.050>.

³ Imam Abdul Syukur, "Profesionalisme Guru Dalam Mengimplementasikan Teknologi Informasi Dan Komunikasi Di Kabupaten Nganjuk," *Jurnal Pendidikan Dan Kebudayaan* 20 (2014): 200-210.

⁴ M Miftah, "Pemanfaatan Media Pembelajaran Untuk Peningkatan Kualitas Belajar Siswa," *Jurnal Kwangsan* 2, no. 1 (2014): 1-11.

⁵ Bahri et al., "Utilization of ICT-Based Learning Media in Local History Learning," *Journal of Physics: Conference Series* 1764, no. 1 (2021), <https://doi.org/10.1088/1742-6596/1764/1/012079>.

media for calculus and even other subjects.⁶ Based on those researches, the current researchers found a gap that is about the English learning media. Therefore, they decided to develop an ICT media for English subject.

The researchers conducted with one of the students and one of the teachers, the use of ICT has not been maximized yet because there are only few subjects implementing ICT in teaching and learning process. Moreover, English subject only used modul in delivering materials. Based on this situation, the reasearchers intended to develop an ICT based learning materials for English subject so that the learners get more and wider ways in learning. Hence, this study aimed to develop an English

Research Methodology

This study is a research and development (R&D) which developed an English learning media.⁷ stated that R&D is a research method used to create a certain product and to test effectiveness of the product. There needs to do need analysis and study the effectiveness of the product developed so that it will be useful for society.⁸ The similar statement was also delivered by.⁹ He believed that Research and Development result could give good advantage for society. This recent study was conducted to develop or perfect the existing product. The existing product was modules then perfecting them in the form of ICT media for English learning. There were five steps in developing the media brought by.¹⁰ Those are analysis, design, development, implementation, and evaluation. The first stage was analysis which analyzed what the students need to increase their learning activity. Then, the researchers planned materials in designing stage. After that, attaching and doing all the materials of the design stage in the media. After the media was ready and done, then it was implemented to the students. The last stage was evaluating to the effectiveness of the media developed. Subjects of this study were validator and the Buddhist students.

Research Finding and Discussion

Research Finding

The research findings showed stages done in this study. Those were need analysis, product design, product development, product implementation, and product evaluation. All of those stages are described below:

Need Analysis

The first step done in this study was having need analysis. It was done to find out problems faced by Buddhist students at Kusalamitra Homeschooling. Need

⁶ Tri Hidayati and Ines Heidiani Ikasari, "Developing Ict-Based Calculus Learning Media," *JPMI (Jurnal Pendidikan Matematika Indonesia)* 5, no. 1 (2020): 10, <https://doi.org/10.26737/jpmi.v5i1.1463>.

⁷ Sugiyono (2014)

⁸ (Koriaty and Agustani, 2016)

⁹ Hanafi, "Konsep Penelitian R&D Dalam Bidang Pendidikan," *Saintifika Islamica: Jurnal Kajian Keislaman* 4, no. 2 (2017): 129–50.

¹⁰ Peterson (2003)

analysis was done by conducting interviews with the teacher and student of Kusalamitra Homeschooling. Based on the interview, the teacher found difficulty in teaching English especially in writing and speaking. It was due to students' vocabulary mastery was still low because they got English subject just from Senior High School. This caused the teacher got difficulty in delivering materials because whatever the materials are, there are still many students did not understand because of their lack of English knowledge. Besides, there was no certain media used in learning English. It caused the students cannot learn English individually. They only can learn English in the classroom. Additionally, the teacher only used modules in teaching English. This condition made the researcher to develop an ICT based English learning application to make the students get easier to learn English.

Design

There were some steps in developing the product. The first step was designing the materials that would be put in the media developed. In designing the materials, the researchers study the recent English topics or English materials taught by the teacher. The materials taught were based on Curriculum 13 brought by Ministry of Education. Then, the researchers determined the materials which were going to be attached in the learning media. This ICT based English learning media was an application contains thematic materials based on basic competence. The application was divided into four parts namely material, unit 1, unit 2, and evaluation. For each unit contained four English skills namely reading, writing, speaking, and listening and also additional part called grammar focus. For the evaluation, there were some exercises related to the material given. The chosen topic was "historical places". This material was used to be developed in the form of learning application. In conducting the materials, the researchers used previous studies related to the topic. The researcher designed and prepared the product materials before those were applied in the application. Here were the processes of designing product:

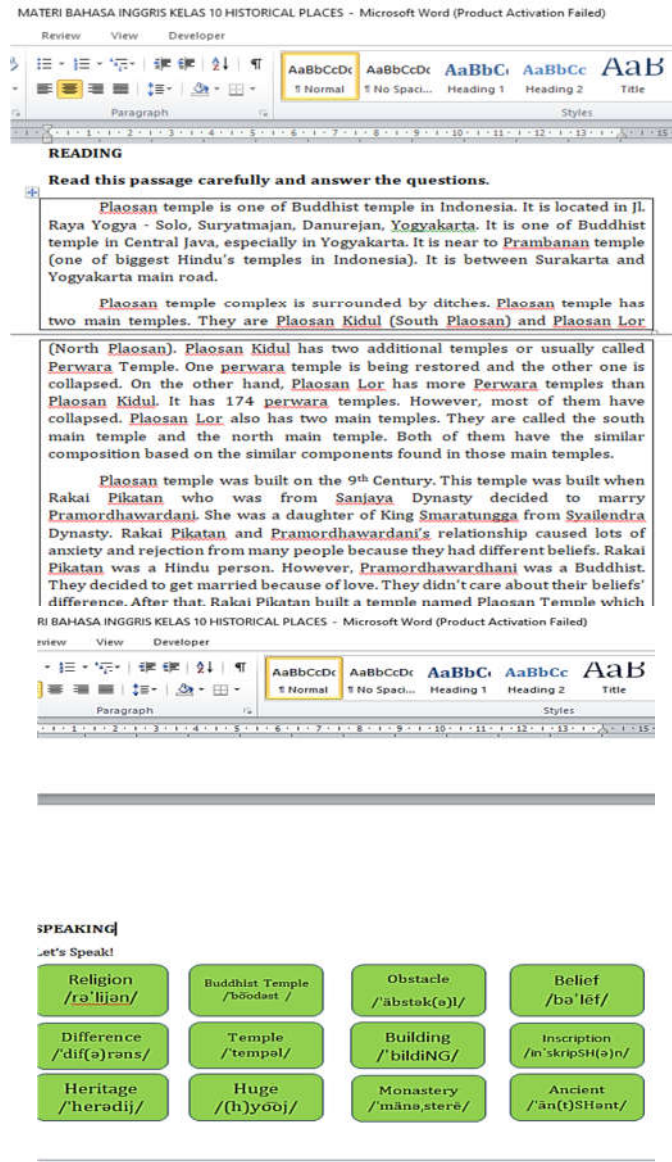


Figure 1. Process of Designing Product

Figure 1 above showed process in designing the product materials. All of those materials were adapted to the curriculum 13 about learning material in the form of equality module presented in digital module.

Development

The English learning media was designed as interesting as possible and as easy as to use. This aimed to make the students more enthusiasts in learning using this media. Besides, they also can learn individually everywhere and every time. This media was android based application so that it was easy to be installed on students' gadget. The media also used colorful background which could interest students' will in learning. The language used in this media was Bahasa Indonesia so it was easy to use and the students can understand the materials easily as well. There were four

menus in this media namely *materi*, *unit 1*, *unit 2*, and *evaluasi*. Here was the display of the media:

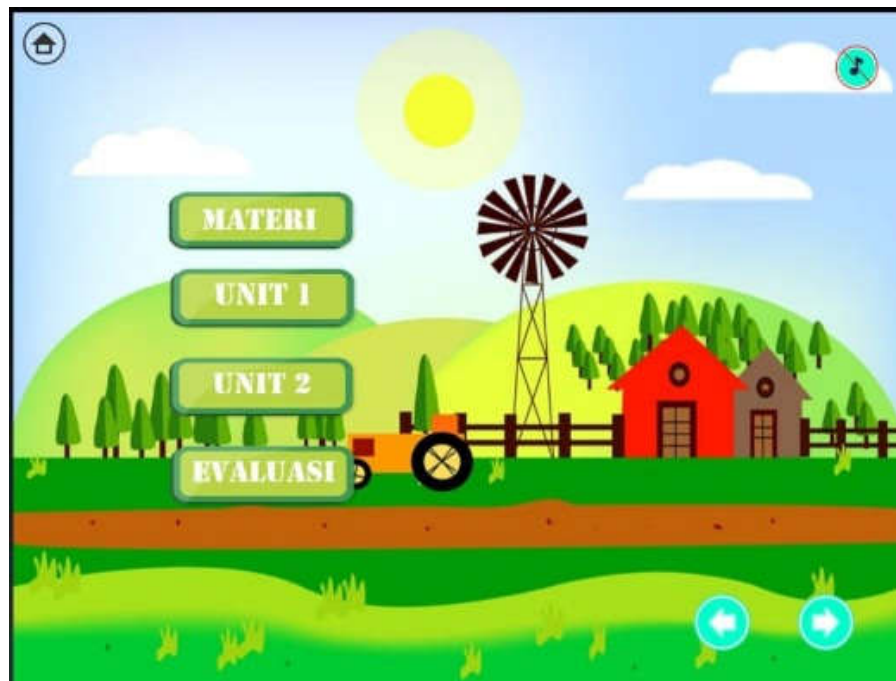


Figure 2. Display of the Media

The figure 2 above showed the display of English learning media. There were two arrow icons that were used to move to next or previous page. It also had home icon that was used to go back to home page. Besides, there was an audio icon which could be played and could be muted based on the students' need. Each menu of this page had certain contents. For the *materi* menu contained English materials depend on topic discussed. For unit menu contained English skill menu such as reading, writing, speaking, listening, and grammar focus. For each skill had certain material designed before. Here was the display of the media developed:



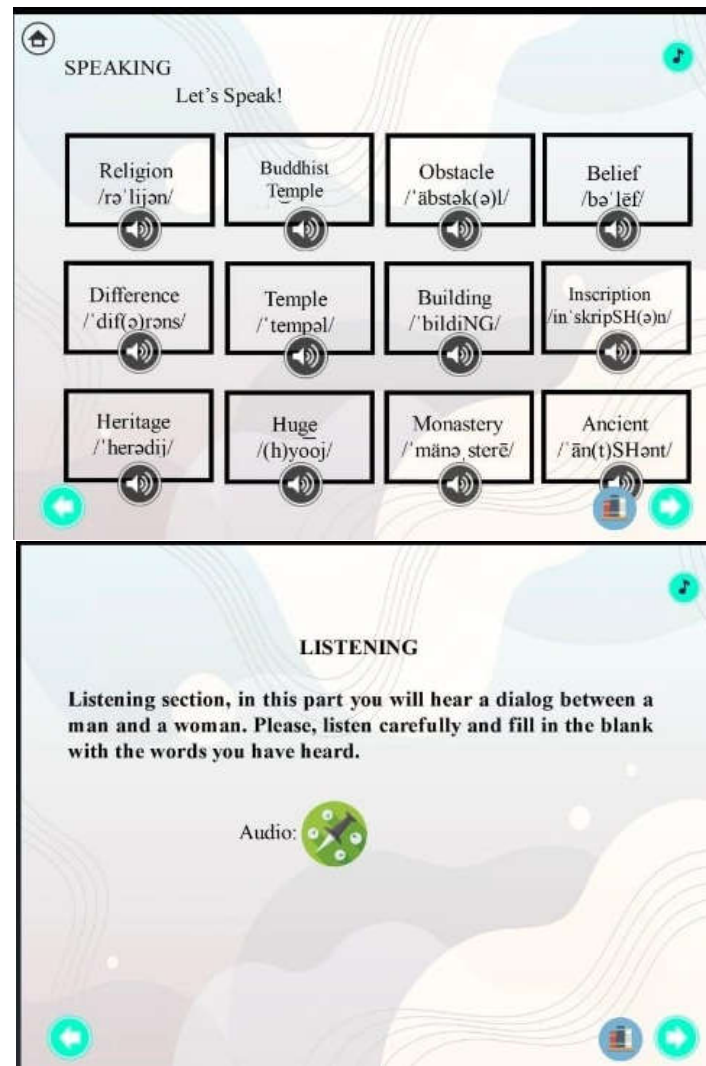


Figure 3. Contents of the Media

The product in the form of media then developed and validated by two media experts. The validation used 4 scales, those were 4 = excellent, 3 = good, 2 = fair, and 1 = poor. The table below showed the validation result:

Aspect	Expert 1	Expert 2
Product display	4	4
Product presentation	4	3
Font quality, size, and color	3	3
Image clarity	4	4
Animation niceness	4	4
Image niceness	4	4
Color niceness	3	3
Ease of media access	4	4
Screen quality	4	4
Ease of use	4	2

Navigation	4	4
Menu completeness	4	3
Instruction clarity of use	3	4
Ease of starting learning program	4	3
Ease of ending learning program	4	4
Total	57	53
Percentage	95%	88,3%

Table 1. Product Validation of Media Experts

There were 15 aspects assessed by the validators. The media expert 1 got 95% and media expert 2 got 88,3%. It meant that the product was feasible to use with adequate revision. The media expert 2 gave suggestion to revise the font quality, size and color. He also gave advice for product presentation. The product should not only android based but also computer based so the researcher developed the product by sharing through google drive which contained computer programs with .exe and .ahl extensions so that the teachers could correct this product and it could be fixed individually.

Implementation

The researcher did socialization about the media developed and how to use it before the students tried the product. After that, the students installed the product on their smartphones and laptops. They tried to use the media and then fill the questionnaires to find out the effectiveness of the developed product. Based on the questionnaires result, the product reached 88,93% which meant that the media was categorized as "excellent" and "very feasible" to be used as learning media. There were five aspects rated by the students. The first aspect was material. It was developed appropriate to the learning purpose and easy to understand since the explanation used Bahasa Indonesia. Besides, they also agreed that the materials were appropriate to their ability. The next aspect was called narration on the media. The students believed that volume, intonation, language style, pronunciation clarity, and pronunciation tempo were quite good. For music aspect, the students rated they agreed that music illustration and music effect supported the program. The next aspect was about visualization in which the students stated that image size, image composition, image color, image sharpness, and image lighting were good. The media illustration encouraged image well and the font choice was easy to read. The last aspect assessed was about the presentation. Based on the questionnaires analyzed, the students stated that the learning media was systematic and image movement was not too fast.

Evaluation

The evaluation was done to identify whether the learning media was appropriate to students need and also to find out students' suggestion after trying the developed media. the evaluation was conducted by spreading questionnaires. As explained before that the questionnaires showed that the developed media was

classified as excellent category and so feasible to use. Most of the students gave good comments towards the media. They stated that the media was appropriate to what they need. The language used in this media also easy to understand. They uttered some suggestion for this media. The first one was adding units to the media since there were only two units existed on this developed media. That was why they expected to have more units so that they learn more materials and wider knowledge to improve their English ability. The next suggestion was adding moving animations or moving images like on the "materi" menu and "unit" menu. Hence, the media needed to be developed to attach many more images and animations. This due to the different learning styles the students use, so they also had different point of view of this media. Overall, this learning media was a good English learning media and could be used in encouraging students' learning activity. However, there still needs to do revision based on the students' suggestions.

Discussion

The development of ICT based media in English learning for Buddhist students at Kusalamitra Homeschooling contains five stages namely need analysis, product design, product development, product implementation, and product evaluation.¹¹ Stated that analyzing needs was a crucial activity to design learning which was appropriate to design purpose to help students' learning needs. Based on the need analysis done, the researcher found what students need. It was about English learning media since they lack of media in learning English individually or in the classroom. The next stage was design.¹² In his study stated that there were some steps in designing products, those were creating and determining learning materials and also evaluating students learning. This recent study also applied design stage which started by creating English learning materials about "Historical Places" and also planned how the learning outcomes were assessed by using evaluation. The next stage of conducting this study was developing product. In the development stage, the learning materials were developed and created based on the storyboard and design created on the previous stage which needed audio, video, graphic, or other multimedia packed in a learning media.¹³

This recent study developed a media contains English learning material designed before. Therefore, all the materials created on the design stage were presented on the developed media. After the media was developed then it was tried out. After the media developed, then it was implemented to the students.¹⁴ In their journal declared that implementation stage aimed to apply the developed product so it needed try out of the media. Therefore, the students tried to install and use the media developed by the researcher in this stage so that they could find out that this media was useful for them. The last stage of research and development research was

¹¹ Nasrulloh and Ismail (2017)

¹² Cahyadi (2019)

¹³ Muhammad Andi Isya, "Pengembangan Model Pembelajaran Instruksional Design Dengan Model Addie Mata Pelajaran PAI Pada Materi Mengulang-Ulang Hafalan Surah Al Ma'un Dan Al Fil Secara Klasikal, Kelompok Dan Individu Kelas V SDN Gedongan 2 Kota Mojokerto," *TA'DIBIA Jurnal Ilmiah Pendidikan Agama Islam* 7, no. 1 (2017): 71-80.

¹⁴ Nailiah and Saputra (2022)

an evaluation. The researchers evaluate the products that had been tried by the students.¹⁵ Found that evaluation was done to identify whether the learning media was successful and appropriate to the expectation. The evaluation of this study was done using questionnaires to recognize that the media had good quality and managed to be the English learning media for the students. ICT based learning media developed was effective to be used in learning English. As¹⁶ stated that learning model based on ICT was practical and effective. Additionally, ICT based learning media can give some advantages for the students. Those were uttered by¹⁷ who stated that ICT Based learning media can attract the students' attention, more fun and easier learning process, give more experience to the students, and also help teacher to teach easily as well.

Implication

The development of ICT in learning English gives good impact to the students and the English teacher. They are more interested and enthusiastic in learning English using the media developed. It is because they can use it daily and individually. In addition, the teacher also has good feedback towards this media. It can help her in teaching and also understanding learning material easier. The ICT media developed can be English supplementary media in teaching.

Recommendation

There are few recommendations delivered in this study. The first was the researchers hope that the developed media can be used as a supplementary English learning media because of the students' enthusiasm towards this media. Besides, the media developed by the researchers need to be expanded so that the contents of the media has more and more materials so that the students can have unlimited topics and materials to be learned by using this media.

Conclusion

Based on the explanation above, it can be drawn conclusion that English learning media was necessary to be developed at Kusalamitra Homeschooling because there was lack of English learning media. The developed learning media was based on information and technology so that it could be used easily by the students because it could be installed. The development of the media was created in five stages. The development of the media considered the curriculum implemented in this homeschooling. The materials contained in this media were original and adopted from the basic competence of English learning there. Based on the media expert validation, the media was categorized as excellent media and very feasible to be used by the Buddhist students at this homeschooling. In addition, the students strongly agree to use this media in learning English individually or in the classroom because this media was fascinating and suitable with their needs.

¹⁵ Sugihartini and Yudiana (2018)

¹⁶ Dumiyati et al. (2019)

¹⁷ Julia et al. in 2022

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