

# Developing Best Analytical Material Application Based on Android in Reading Skill for Eleventh Grade Students

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## ABSTRACT

The objective of this research is developing BACA (Best Analytical Material Application) as a learning media based on android using iSpring Suite 10 in reading skills for 11<sup>th</sup> Grade Islamic Senior High School of (MA) Ma'arif 1 Jombang. The research method of this study is Research & Development (R&D) and the researcher choose ADDIE model in developing the product. There are 5 stages of development using ADDIE model: Analyze, Design, Development, Implementation, and Evaluation. The researcher used validation sheet to evaluate the quality of BACA learning media. The result of media validation is 3.5. Moreover, the result of material validation the researcher got 3.4, in other word it was a very good category. Meanwhile, the result of the implementation product obtained from the student response questionnaire were 91%. Based on these data, it can be concluded that BACA (Best Analytical Material Application) based on android for 11th Grade Islamic Senior High School of (MA) Ma'arif 1 Jombang has good quality and can be used as a learning media in real class.

Keywords: BACA; iSpring Suite 10; Reading.

#### **INTRODUCTION**

As an international language, English is widely spoken in many places around the world. By the end of 20<sup>th</sup> century, English had established itself as a global language and it is widely accepted on social, economic, and political levels (Ahmad, 2016). Meanwhile, in education English is taught in schools starting in elementary school and continuing through senior high school. Basically, English has four kinds of language skills that a teacher must teach to the students as a listening, speaking, reading, and writing. According to Grabe and Stoller (as cited in Ahmadi, 2018) for proficiency and communication, students use many components of English language abilities such as listening, speaking, reading, and writing. However, in this study the researcher focused on the reading skills.

Reading is very important skill that people must have. Reading became one of the most crucial abilities that language learners must master (Dahliana, 2016). Reading is the action of understanding information from a text that the reader has read. According to Ismail (2017) reading is a written language communication method that uses texts to communicate. Then in other definition according to Dean (2013) reading requires more than just seeing words clearly, accurately pronouncing a word, and understanding the meaning of single words, but also comprehending all aspects that include in a text. From the definition of reading above the researcher can conclude that reading is an activity that requires you to think, feel and understand a meaning or information from the author in written text. Meanwhile, the definition of reading in this research is an activity to find and understand in the Analytical Exposition text.

Nowadays, technology is widely used in education, for example to information sharing, communicate, and as an interactive learning media. Learning media or commonly referred to as learning resource used in the teaching and learning process to deliver learning materials. The use of learning resources has made many innovations, for example learning resources from android. According to Jeong (as cited in Julianingsih et al., 2021) a gadget or android is a small technological tool with a defined function that is frequently adopted as a novelty or innovation. Learning media is a tool that used to deliver a learning material from the teacher to the students. According to Syafitri (2021) the media is a tool used to deliver messages to students to attract attention, provide stimulus, and make learning more effective.

However, the learning media continues to develop by the times. At the times, many learning media use moving images and additional sound (audio-visual). The combination of these two things is

known as multimedia. According to Siregar (2020) multimedia is frequently interpreted as a combination of multiple media or at least more than one learning media. To develop an interesting interactive multimedia, it is necessary to use an application as a tool to develop the interactive multimedia, one of the applications that can be used is iSpring Suite.

iSpring Suite is an application used to create an ICT based learning media. According to Yuliani (2010) a product called iSpring Suite converts Power Point presentations into flash-based online learning. Meanwhile, according to Febriyanti & Sari (2022) iSpring Suite is e-learning software that enables for the rapid creation of e-learning courses. From the definition above, the researcher can conclude that iSpring Suite is an e-learning software that can converts Power Point and can make learning materials more interesting.

Based on the data collected when conducting a need analysis on April, 6th 2022 in (MA) Ma'arif 1 Jombang, the researcher found that at the time of teaching and learning activities the teacher more often conveys the material directly or using a book as a learning media and sometimes occasionally uses Power Points, this is due to a lack of learning media. The students sometimes feel bored and do not understand the material that they learned. Besides this, only a few students use android as a learning media for learning English.

Based on these problems, the researcher designed an android application as learning media to support teaching and learning activities in reading material. This application is expected to help the students as a reference in learning other than books, so they can study anywhere and anytime just using android.

Many of the previous studies conducted research on the development of learning media based on android in reading text material as an innovative of learning media that can be used anytime and anywhere very easily and fun. For example, Sari (2019) developed Android-based smartphone learning application on teaching reading comprehension for 10<sup>th</sup> Grade of Senior High School in Solo. In the study, researcher focused on reading comprehension. Researcher used qualitative data and used ADDIE model as the instructional design. The results of this study showed that the development of android-based learning media can be used properly. The statement is also supported based on the assessment of media experts and material who provide assessments with excellent categories. Thus, it can be concluded that the development of android-based learning media on reading comprehension can be used.

Another research was conducted Wulandari & Afidah (2021) who developed a learning media based iSpring for XI grade in MA Albairunny that consisted of 16 students. The researcher only used Analytical Exposition Text for the topic and focused on their reading skill. Then the method that the researcher used is Research and Development with ADDIE model as an instructional design. The results of this study show that the product in the form of ISpring-based learning media that has been developed by researchers is quite good and worthy of trial. Based on the assessment that has been obtained by researchers from material experts is 3.93 and obtained 3.76 in media experts. Thus, the developed product is already quite good from the average of the overall aspects.

From some of the previous studies and the need of the students, the researcher developed BACA based on android application using iSpring Suite 10 on reading text to support teaching and learning activities for 11<sup>th</sup> Grade Islamic Senior High School (MA) Ma'arif 1 Jombang.

#### **METHOD**

In this research, researcher uses Research & Development as research design. Research and Development has several development models that can be used for doing research, namely: Borg and Gall, 4D, Dick and Carey, and ADDIE. But, in this research, researcher use ADDIE as a model. There are 5 stages of development using this model as follow:

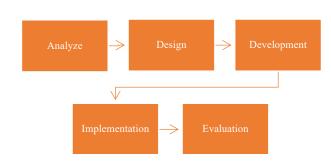


Figure 1. Research and Development Procedure based on ADDIE (Muruganantham, 2015)

# **RESULT AND DISCUSSION**

## Result

Some of the procedures in ADDIE model are: 1) Analyze, 2) Design, 3) Develop, 4) Implement, 5) Evaluate.

## • Analyze

The first stage in conducting using the ADDIE is to conduct an analysis to determine the needs of students as well as their knowledge and skills. The researcher conducted an offline analysis using interviews as an instrument in 11th Grade Islamic Senior High School (MA) Ma'arif 1 Jombang. Interviews were conducted to obtain data from the teacher and the student needs.

Based on the data collected when conducting a need analysis, the researcher concluded that there were shortcomings in the use of learning media in reading materials. The teacher said that at the time of reading learning she used books and sometimes used Power Points. When explaining the generic structure on the analytical material, the teacher used paper media to write generic parts of the structure on the text and then told the students to paste the part. From the lack of learning media, teacher stated that students become less creative because they only stick to parts. Based on these problems, the researcher developed BACA as a learning media based on android using iSpring Suite 10 in reading skills for 11th Grade Islamic Senior High School (MA) Ma'arif 1 Jombang.

## • Design

In this second stage, the researcher designed a product as a learning media from the data that has been collected at the need analysis stage in 11th Grade Islamic Senior High School on Analytical Exposition Texts. Researcher designed learning media using Power point, Benime, iSpring Suite 10, and Website 2 Apk Builder.

First, researcher designed the background of each slide which was then hyperlinked using Power Point, then the Benime application was used to create learning videos with hand animations moving on a white board regarding the Analytical Exposition text material. Meanwhile, iSpring suite 10 used to create various exercises such as: select from list, multiple choice, and true/false. After each slide on the Power Point was completed, then the Power Point was published to HTML using iSpring suite 10, to turn the HTML into an application, the researcher used Website 2 Apk Builder.

• Develop

In this stage, the researcher needs to validate the product to the experts by using a validation sheet. There are two experts who validate the product. The first expert on media namely Ulfa Wulan Agustina, M.Pd., she is a lecture of English Education at KH. A. Wahab Hasbullah University and she also teaches ICT lessons. The second expert namely Nurul Widyawati, S.Pd., who validated the material in the product. She is an English teacher in (MA) Ma'arif 1 Jombang. The following was the results of media validation:

No	Description	Score
1	Media in attractive and simple design	3
2	Ease of use of media	4

Table 1. The Result of Media Validation

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No	Description	Score	
3	Accuracy of selection of clearly readable fonts	4	
4	Accuracy of font and background color selection	4	
5	Accuracy in the selection of letter sizes	4	
6	Compatibility of the video with the material	3	
7	The quality of learning videos	3	
8	The accuracy of the back sound in the learning video	3	
9	The media is in accordance with the user	4	
10	Media can be used independently and guided	4	
11	Accuracy of the function of the navigation buttons	3	
12	Varied exercise models	3	
SUM		42	
AVERA	GRE	3,5	

Based on the table, researcher got an average score of 3,5, it was a "Very Good" category. It meant that the results of the BACA Application assessment on the media validation sheet was deserved to be tested. The following was the result of material validation:

No	Description	Score	
1	Material in accordance with learning competencies	4	
2	How to deliver interesting and not boring material	3	
3	Students can learn independently	3	
4	Complete presentation of the material	4	
5	Conformity of the material to the target user	4	
6	The material is presented clearly	4	
7	Accuracy of grammatical use	3	
8	Giving appropriate examples according to the material	3	
9	Exercises to understand the learning material	3	
10	Compatibility between exercises and learning materials	3	
11	Varied exercise models	4	
12	Proportion of the amount of exercise	3	
SUM		41	
AVERAG	E	3,4	

 Table 2. The Result of Material Validation

Based on the table, researchers got an average score of 3.4, it was a "Very Good" category. It meant that the results of the validation sheet from the BACA Application learning media on material validation was deserved to be tested.

## • Implement

In this stage, the BACA (Best Analytical Material Application) learning media was tested on 8

students in 11<sup>th</sup> Grade Islamic Senior High School at (MA) Ma'arif 1 Jombang. Implementation was carried out offline in school. The researcher conducted an implementation by sharing the BACA application with students, then each student could try the application on their own android.

After that, the researcher distributed questionnaire to the students to find out the students' opinion about BACA Application. Based on the questionnaire that has been filled out by the students, the researcher knew the student's response to the learning media that the researcher had developed. The following was the result of the student's responses questionnaire:

No	Max Score	Score	Average of Percentage	Description					
1	32	31	96,8%	The design on the learning media BACA Application is very interesting					
2	32	30	93,7%	The use of learning media is very easy					
3	32	28	87,5%	Exposition analytical material is delivered simply clearly, and easily understood					
4	32	28	87,5%	Videos on learning media help you to more easily understand the exposition analytical text material					
5	32	28	87,5%	There are exercises that can help you to measure your understanding of the analytical material of the exposition					
6	32	32	100%	Presentation of material in learning media BACA Application can help you to answer the exercises					
7	32	25	78%	Learning media BACA Application using easy to understand language					
8	32	31	96.8%	The shape of the model and font size used are simple and clear					
	233 91			SUM AVERAGE					

Table 3. The Result of Student Responses Questionnaire

Based on the table, the result average score from the student questionnaire response got 91%, it was a "Very Good" category. It meant that the result of the student questionnaire response stated that BACA Application could help the students learning English in reading text material especially in Analytical Exposition Text.

#### Evaluate

In the last stage of ADDIE model, the researcher revised the product as suggested by the experts. The following was the final product of BACA Application:



Figure 2. Home Screen



Figure 3. Info App



Figure 4. Main Menu



Figure 5. About Menu



# Figure 6. Materials Menu



Figure 7. The Example Menu



Figure 8. Exercise Menu

Question List	Question 1 of 22   Your Scene & of
Specify the p each drop-dr	arts of the following text and choose the correct answer in wn list:
Conventionally	students need book, pen, eraser, drawing book, ruler and such other
stuff, Address	By, in this multimedia-era, students need more to reach their
progressive de	elopment. Students need mobile keyboards to record every presented
subject easily.	Of course it will need more cost but it will deserve for its function.
- Select -	v I
Theis	ols tend to apply fast transferring knowledge because the school
Reteration	target of curriculum. Every subject will tend to be given in
Argument	thad. Consequently students need extra media cover the subject.
	SUBAT

Figure 9. Specify Exercise

IF Question List	Question 2 of 22 Year Score 0 of 56	
	over smoking unacts or earning in smoke mover up a tima attacks and even cancer.	
	perous and a health risk to the smokers. Cigarettes	
	sease and people should not smoke anywhere,	
	Therefore, smoking in restaurants is impolite, a health risk to the smokers and should not be	
allowed in any restaura	ints.	
1. Smoking in the restau	arants must be avoided because?	
All answers are correct	1	
) its dangerous to the s	mokers	
) it can cause heart and	lung disease	
A		
	SUBN	VIT

Figure 10. Multiple Choice Exercise

C Question LM	Que	dion 7 of 22 1 Nov 5 con	(3-of 50   👹	24
read books, newspaper o			mn such	
as comedy, short story, q				
The last, reading can also				
book about irian Jaya we	may feel we're real	ly sitting in the jun	ples not at	
home in our rooms.				
From the facts above, it's				
knowledge, information a		sent. Or in summar	y we can	
say reading is truly impor	tant in our life.			
Statement				
6. Reading is unimportant	t activity in our life.			
O True				
Fahe				

Figure 11. True False Exercise

## Discussion

Some of the advantages of the BACA Application are as follows: First, it can be new innovations for learning reading text materials. When teaching reading material, teacher only uses books and sometimes uses Power Points as a learning media, and teacher feels that this causes students to be less creative. Through the learning media of the BACA Application, teacher and students feel that they are getting new innovations in how to learn reading text material using different media. As Jeong said (as cited in Julianingsih et al., 2021) a gadget or android is a small technological tool with a defined function that is frequently adopted as a novelty or innovation.

Next, it can be used to learn anywhere and anytime in offline mode. Students can use BACA Application anywhere and anytime through their Android without using an internet connection. Quoted from Martono & Nurhayati (2014) mobile learning is a learning strategy that takes happen in a different location or situation and used portable technology regardless of time and space.

Third, features on the media are easy to operate. The use of the BACA Application media is very easy because students just press the navigation button to use the application. As explained in some of the advantages of ICT, namely it is easy to use, content quality, a supporting learning system to do interactive and educational evaluations (Binyamin et al., 2019).

Last, students with both visual and audio-visual learning styles can use it. The material on the BACA Application learning media is delivered in text form and also learning videos. Thus, students with an audio-visual learning style will not feel bored. According to Akram, Sufiana, and Malik (as cited in Olagbaju et al., 2020) sensory experiences triggered by visuals, motion pictures, slides and sounds, films, and other audio-visual tools make learning more interesting.

In addition to having advantages, the BACA Application also has the following disadvantages: Teacher can't get a recap of a student's grades at the time of doing the Exercise automatically. The solution to this is that the teacher can tell students to screen the results of the Exercise assessment

#### CONCLUSION

Based on the discussion of data in the form of qualitative and quantitative, researcher got the results from media validation is 3.5 with "Very Good" categories. Then, in the validation of the material, the researcher got a score of 3.4 and also in the "Very Good" category. Meanwhile, the results of the implementation products obtained from the student response questionnaire were 91% with "Very Good" categories and can be used as a learning media for reading material for 11th Grade Senior High School in (MA) Ma'arif 1 Jombang. In other word, the BACA (Best Analytical Course Application) can meet students and teacher need in reading instruction especially Analytical Exposition Text.

For other researchers, this research still has shortcomings and needs improvement in the media BACA Application, precisely in the exercises section because it cannot automatically recap the names, classes and grades obtained by students. And the researcher hopes this research can be used as a reference for other Research & Development method as well as to solve the same problem.

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