

THE DEVELOPMENT OF ANDROID-BASED LEARNING MEDIA APPLICATION FOR *BASIC ANALYSIS OF PROSE* COURSE

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Abstrak

Penelitian ini bertujuan untuk menguraikan pengembangan media pembelajaran berbasis aplikasi android dan menganalisis kelayakan media pembelajaran. Desain penelitian ini menggunakan metode Research and Development (R&D) dengan menggunakan model ADDIE yang dikembangkan oleh Dick and Carey (1996). Teknik pengumpulan data dilakukan melalui wawancara dan kuesioner dengan uji validitas data dan dokumentasi. Validasi media pembelajaran dilakukan oleh ahli media dan ahli materi. Media diujicobakan kepada mahasiswa semester enam Jurusan Pendidikan Bahasa Inggris di Universitas Billfath. Teknik analisis data menggunakan metode campuran (kualitatif dan kuantitatif). Hasil dari penelitian ini menunjukkan bahwa media ini layak digunakan karena disetujui oleh validator ahli media dengan persentase 85%, validator ahli materi 92% dan respon mahasiswa 85%. Selain itu, media ini dapat membantu mahasiswa melakukan pembelajaran dengan lebih efektif, menarik, dan menyenangkan, serta membantu mahasiswa dalam memahami materi Analisis Dasar Prosa.

Kata kunci: Pengembangan, Berbasis Android, Media Pembelajaran, Prosa.

Abstract

This study aims to elaborate the development of learning media based on android applications and analyze the feasibility of learning media. The design of this study applies Research and Development (R&D) method which uses ADDIE model that was developed by Dick and Carey (1996). Data collection techniques were carried out through interview and questionnaire by validity test data and documentation. The validation of learning media was carried out by media experts and material experts. The media was tested on students in sixth semester of English Education Department at Universitas Billfath. Data analysis techniques uses mixed methods (qualitative and quantitative). The results of this study indicates that the media is suitable for use because it is approved by the media expert validator with a percentage of 85%, the material expert validator 92% and students responses 85%. In addition, this media is able to help students conduct the study more effective, interesting, and fun, and also it helps students get better understanding of Basic Analysis of Prose material.

Keywords: Development, Android-based, Learning Media, Prose.

INTRODUCTION

In the 21st century, technological developments are increasingly rapid. As we know that the technology has spread widely in human life. Raja & Nagasubramani (2018) asserted that “Technology has become an information media that has changed the way people live, from the way they communicate, learn and teach”. In this circumstance, technology has several impact. For instance, in educational aspect. The use of technology as a learning medium is expected to facilitate the teaching and learning process and the quality of teaching and learning to increase.

This is a new challenge in the 4.0 revolution era which demands innovation in the learning process from traditional learning systems to modern learning system. Yuni Arista (2022) argued that “The era of the industrial revolution 4.0 is an era of change from analog systems to digital systems that make technology as the foundation of society and have an impact in education”. Therefore, teachers are required to make good using of technology in the learning process.

According to Handoyono & Rabiman (2020) the educational challenge that needs to be developed in Indonesia today is media-based learning. The educators as a facilitator as well as a material provider also adjust the learning media made by technological developments according to the era. Learning media that are often used by educators include *e-book*, *e-module*, *PPT (Power Point)*, *Google Classroom*, *Whatsapp*, *Zoom Meeting* or *Google Meet*. The use of learning media has not been able to make students understand the material being taught.

Alternative that can be done by the educators is using smartphones as learning media. Liu & Gan (2019) stated that “In the last decade, the use of android-based smartphones in learning has become popular”. It means that using Android-based learning also grows rapidly as technology development. Smartphones can be used as mobile learning in the learning process. Mobile learning is learning that uses electronic media as the main teaching material that can be accessed anytime and anywhere. Thus, it can make students easier to find information without limitations of space and time.

Smartphones, especially *android*, can be used as mobile learning in the learning process. Educators can take advantage of this Android-based smartphone by making an application or using an application that is already available on the *Playstore*. By application, teachers can increase students' interest in learning during the learning process, especially in learning English. Yulduz (2021) confirmed that "English is an international language that has been used by many people as a first or second language in communicating in spoken or written form". In Indonesia, English is considered as a second language and students must learn it. There are four skills in learning English, such as, listening, speaking, reading and writing. However, there are specific knowledge that should be understood deeper, such as, linguistic and literature.

In line with paragraph above, literature is one part of learning English that is important to be learned. It is a work of art that language as the media (Kurmanbay, 2020). In this circumstance, students attempt to create meaning contained in a literary work. Students pay attention to how language can operate in a text. Therefore, students must be able to understand the content that is contained in a literary work correctly. In order to create meaning that is easy to understand. By this authentic text, students can increase awareness in language.

In studying literature, students will observe the moral values contained in a literary work. By reading literary texts, students attempt to understand the meaning and helps develop students' positive personalities. According to Altun (2018) to maximize language learning, there are several resources that can be used, among them are: poetry, drama, and prose (novels and short story). By reading poetry, students can develop fun analytical skills. Through drama, students become familiar with the use of language in context. Through prose, students can increase their creativity and imagination. Through novels, students can develop insight about various groups of people or cultures. Through short story, students can develop creativity and critical thinking.

Related to the paragraph aforementioned above, prose is a free essay that is not bound by the number of lines, syllables, rhythms and rhymes in each line. Al-Jadallah

& Daraiseh (2022) argued that “Prose comes from the simply nature and shows more reason”. It conveys utterances directly, easily, clearly and logically that is thought, intellect and the meaning contained there. As a language learner, prose is also very important to be learned. By studying prose, students can improve their language skills. Hence, understanding prose in learning English must be considered.

In this case, the media used in prose learning must also be interesting and varied. In the teaching and learning prose, *PPT (Power Point)* or *e-books* are always used. Handoyono & Rabiman (2020) stated that “By using these media students cannot improve their thinking skills and will make students bored and lazy to learn”. Therefore, in studying prose, a teacher must be able to create or develop learning media that are more interesting and interactive and of course by utilizing technological developments in today’s era.

The importance of a teacher developing learning media in teaching and learning activities is certainly very much needed, in order to achieve maximum learning goals. However, various backgrounds and learning objectives require a teacher to determine a particular model, characteristic or design. Therefore, in this study the researcher offers ADDIE development model that developed by Dick and Carey (1996).

Based on the background above, the researcher are interested in developing learning media that can increase students’ interest in learning prose by more interesting media. In this research, researcher will create an android-based learning media so that students can learn enthusiastically, seriously and optimally in learning. Therefore, this media makes the educator easier to teach prose material to students and can create a pleasant classroom atmosphere.

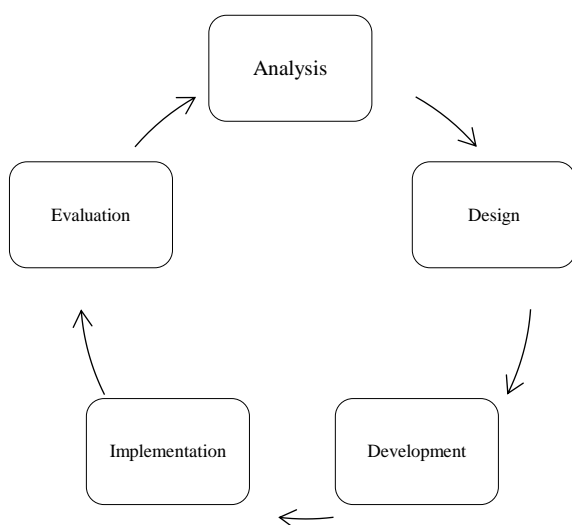
METHOD

In this research, the researcher develops an android-based learning media application using EPA (English Prose Application) and analyze the feasibility of the media to improve in understanding of *Basic Analysis of Prose* course. The researcher starts from

observing the problems that students get and the researcher hopes that the problem can be solved when this research is end.

Design

This research uses a Research and Development (R&D) with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) developed by Dick and Carey (1996). Musahrain, (2016) said that “This model can be applied in the development of learning products, such as learning methods, learning models, learning strategies and learning media”. Thus, it can be said that ADDIE model can be used to develop learning media.



There are 5 steps that will be carried out by researcher. The steps are as follows:

1. Analysis

The first step is the researcher analyze the problems encountered during the teaching and learning process related to the learning media used.

2. Design

At this stage, the researcher collects materials, arranges materials, questions and answers, makes backgrounds, and displays as needed and makes instruments for product evaluation in the form of questionnaires.

3. Development

At this stage, the researcher develops the media according to the initial design. The researcher creates learning media, then validate the product on the material and media expert validator. After that, the researcher revises the product according to the suggestions from the validator.

4. Implementation

At this stage, the researcher conducts a product trial, which was carried out in a class involving many students to determine student responses and the feasibility of the application.

5. Evaluation

At this stage, the researcher evaluates the results of the assessment to find out whether this product is appropriate or not if used as a learning media of *Basic Analysis of Prose*. Evaluation in this research is formative and summative evaluation.

Participations

The subject in this research is students in the sixth semester of the English Language Education Department at Universitas Billfath. The validators consist of material and media experts from lecturer of English Education Department.

Instruments

The data collection instruments in this research used interview, questionnaire and documentation.

1. Interview

Interview is one of the tools that used by researcher in the form of question and answer activities to respondents with the aim of obtaining information. In this research, the researcher conducts interviews with the lecturer of *Basic Analysis of Prose* to obtain data and seek further information about problems that occur in class.

2. Questionnaire

Questionnaire is a tool that used by researcher to collect data and record it by asking several questions to respondents (students, material experts, and media experts).

The questionnaire method that used by researcher to measure program indicators related to program content, learning materials, program appearance and program effectiveness. The questionnaire was carried out twice. The first questionnaire was intended to find out the needs of media analysis and the second questionnaire was intended to find out the results of product trials.

3. Documentation

This documentation is in the form of photos during the learning process using application-based learning media and when filling out the learning media assessment questionnaire.

Data Collecting Technique

In this research, data collection techniques were carried out in the following way:

1. Observation

Observation is one of the data collection techniques carried out by researchers through observation and recording. Observations were obtained through questionnaires and interviews. The questionnaire will be conducted twice as described above. While interviews can be conducted to lecturers and students.

2. Validity Test Data

Validity test data is obtained through a validation sheet based on the assessment expert validator. The type of sheet validation used is the material validation sheet. The answer scores given by media and material experts are as shown in the table below:

Table 1. Media and Materials Expert Scores adapted from Adnin (2015)

Score	Answer
5	Very Suitable
4	Suitable
3	Suitable Enough
2	Unsuitable
1	Very Inadequate

The feasibility test data was obtained from the research instrument in the form of a student response questionnaire. This data is needed to determine the feasibility of the product as a *Basic Analysis of Prose* learning media. The answer scores for respondents can be seen in below:

Table 2. Respondent Scores Adapted from Adnin (2015)

Score	Answer
5	Strongly Agree
4	Agree
3	Neutral
2	Disagree
1	Strongly Disagree

Data Analysis Technique

After all the data has been collected, what the researcher do is process the data. The data is analyze using the formula. The data obtained is in the form of quantitative and qualitative data. Quantitative data is data in the form of numbers. While qualitative data is data in the form of suggestions or responses included in the questionnaire.

The data analyze in this research are validator data and student material test data. The data will be processed using descriptive percentage analysis techniques, with the aim of converting quantitative data into percentage form and then interpreting it in the form of qualitative sentences.

The formula used to calculate the percentage is adopted from Siddiq (2021):

$$P = \frac{f}{N} + 100\%$$

Explanation:

P = Percentage number of questionnaire data

F = Total score obtained

N = Total maximum score

After that, the percentage results end with the percentage score. The higher score is the higher the level of eligibility. The criteria for the results of the validator's assessment and the test subject can be presented as follows:

Table 3. Validator's Assessment and the Test Subject Criteria Modified from Siddiq (2021)

Percentage (%)	Level Criteria
81% - 100%	Very Proper
61% - 80%	Proper
41% - 60%	Proper Enough
21% - 40 %	Improper
0% - 20%	Very Improper

FINDINGS AND DISCUSSION

This chapter contains research finding including the development process, validation results, as well as student responses and research discussions.

Findings

The development of android-based learning media application in *Basic Analysis of Prose* course was carried out at the sixth semester in English Language Education Department Universitas Billfath. This research and development was conducted to determine the feasibility of EPA as a learning media.

The first stage carried out by the researcher is an analysis. In this stage, researcher conducts an interview with the student to get information and also distributing questionnaires to students, so that the researcher obtained initial data regarding the analysis of student needs. From the results of this analysis, it can be seen that according to students *Basic Analysis of Prose* is a difficult subject, then the learning media used in class also does not attract students' attention so that learning feels monotonous and unpleasant. To create a fun learning process, it is necessary to have creative and innovative learning methods, models and media. In the digitalization era, technology has become a part of human life. Likewise with the teaching and learning process also can not be separated from technology. The involvement of technology in the learning

process can create an exciting and fun learning atmosphere. Therefore, the existence of technology in a lesson will really help students motivate in learning.

Fun learning can also help students understand the difficult material. For example, *Basic Analysis of Prose*. The material is difficult because the language used is not understood by students so it is difficult for them to understand the material. In addition, the learning media used is less attractive so students are not motivated to learn. Therefore, interesting and interactive learning media are needed such as application-based learning media.

After that, the second stage is design. At this stage the researcher designed a product based on the needs analysis in the previous stage. This product is an Android-based learning media application that contains prose materials. At the design stage, there are several steps carried out by researcher in designing the media. The first step is designing the media design (story board). Second, collecting material sourced from the internet and the book "Introduction to Literature" 2nd edition by Mario Klarer. Beside the material, researcher also prepared the quizzes. The last step in the design stage is making media like the initial design. The initial product was validated by experts in their respective fields, such as material experts and media experts.

The third stage carried out by researcher is development. At this stage, the product results that have been assessed by experts will be developed. The researcher creates learning media based on android applications using *Kodular* and *Canva*. Then validate the product on the material expert validator and media expert. After that, the researcher revise the product according to the suggestions from the validator. The results of product feasibility validation by material experts obtained a percentage.

After the product has been developed, then proceed to the implementation stage. At this stage, the researcher tested the product on students and also made observations during the product trials. After testing the product, students were asked to fill out a questionnaire about the feasibility of the product. Based on the results of the questionnaire, there were 17 responses from students. The total students is 19 but 2

students did not attend class, so only 17 students filled out the questionnaire. The results of the questionnaire get a percentage.

The last stage is evaluation, at this stage the researcher evaluates the product using formative and summative evaluation. Researcher uses summative evaluation because it is to determine student achievement. While formative evaluation aims to determine the feasibility of the product, not the effectiveness of the product.

Discussion

The discussion in this study is about development results to answer the formulation of the problem in “The Development of Android-based Learning Media Application for *Basic Analysis of Prose* Course” at Universitas Billfath, 2023.

The Procedure for Developing EPA (English Prose Application)

In line with the background of the study, from the results of this analysis, it can be seen that according to students *Basic Analysis of Prose* is a difficult subject, then the learning media used in class also does not attract students’ attention so that learning feels monotonous and unpleasant. To create a fun learning process, it is necessary to have creative and innovative learning methods, models and media.

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2nd edition by Mario Klarer. Beside the material, researcher also prepared the quizzes. The types of questions used by researcher is multiple choice and essay. The researcher chose this type of question because it is a suitable and efficient test for use in a learning test. As O'Dwyer (2012) said that “Multiple choice and essay is a test that is suitable for use in knowledge-based subjects”.

The example of multiple-choice questions:

1. is a type of prose in the form of a limited narrative that tells about an incident experienced by the main character.
Please complete the sentence above!
 - a. Legend
 - b. Short story
 - c. Autobiography
 - d. Fable
 - e. Biography

The example of essay questions:

1. Please make an autobiography!

The third stage is development, at this stage, the researcher creates a media. Here is the views of the design of learning media:



Figure 2. Welcome Page



Figure 3. Main Menu Page

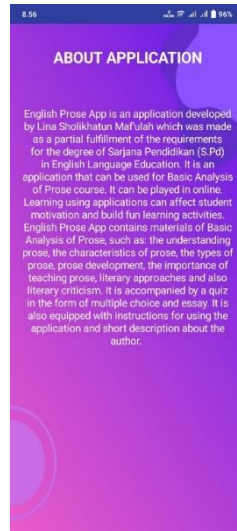


Figure 4. About Application Page

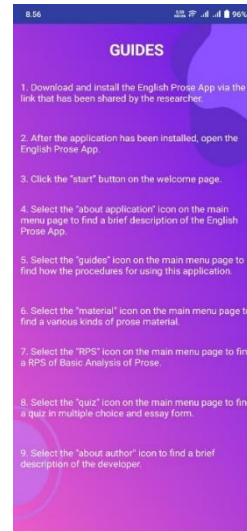


Figure 5. Guides Page



Figure 6. Material Page



Figure 7. Understanding Prose Material



Figure 8. RPS

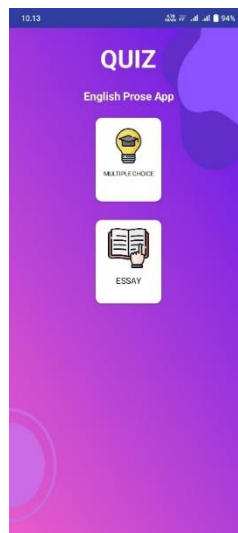


Figure 9. Quiz Page

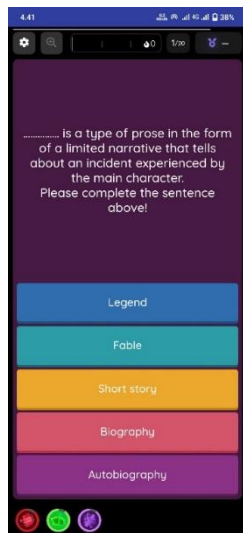


Figure 10. Quiz



Figure 11. About Author Page

After finishing the media, the researcher validates it to the the media and material expert. The following are some suggestions from media experts:
from media experts:

Table 4. Media Expert Validation Result

No	Aspect	Indicator	Result
1	Presentation Design of the Media	The media design appropriate with the material	4
2		The attractiveness of the media	4
3		The menus of the media is understandable	4
4		The arrangement of the media are good enough to motivate the student in learning	4
5	Layout	The composition of color of the media is already well-suited.	4
6		Consistency pattern (layout of the text and pictures)	5
7		Accuracy and feasibility	5
8	Illustration	The use of illustration is appropriate with the topic of the materials	4
Total Score			34
Average			4,25
Percentage			85%

Based on the table above, it can be concluded that the result of the media expert assessment in stage one obtained a value of 34 with a percentage of 85% belonging to the “very proper” criteria.

Table 5. Material Expert Validation Result

No	Aspect	Indicator	Result
1		The suitability of the material with RPS	4
2		The suitability of the content or description of the material	4
3	Content	The adequacy of material weight to the achievement of learning objectives	5
4		The suitability of the material with students character	5
5		The clarity of examples included to clarify the contents of the material	4
6	Language	The language used in accordance with the development of students	5
7		The language is easy to understand	5
8	Learning	The media is able to encourage the curiosity of students	4
Total Score			36
Average			4,5
Percentage			92%

Based on the table above, it can be concluded that the result of the material expert's assessment in stage is obtained a value of 36 with a percentage of 92% included in the "very proper" criteria.

The fourth stage is implementation, at this stage the researcher tests the product in the classroom. At the time of product implementation, there were 17 students who participated. The students looked more enthusiastic and gave a good response to the learning media.

The final stage is evaluation, at this stage the researcher evaluates the product using summative and formative evaluation. The researcher uses summative evaluation because it is to determine student achievement. The following are the results of the student quiz:

Table 6. The Result of Students Quiz

EPA (English Prose App)	
Played on	Monday, 3 April 2023
Played by	17 players
Total correct answers	45,59 %
Total incorrect answers	54,41%
Average scores (points)	7542,94 points

Based on the table above, it can be seen that there were 17 students who finished the quiz on Monday, April 3rd 2023. The total number of correct answers was 45.59% and the total number of wrong answers was 54.41%. While the average score is 7542.94

points. Based on the acquisition of these scores, it can be said that the total correct score is smaller than the total wrong score. This is because the implementation of the product is only done once and only studies one material, namely the material “The Importance of Teaching Prose”. Meanwhile, when filling out the quiz, the questions contained in it are questions from all Prose materials. Thus, the total wrong score is bigger than the total correct score.

Researcher also uses formative evaluation aims to determine the feasibility of the product, not the effectiveness of the product. The following are the results of the student’s questionnaire about the feasibility of the product based on students’ experience during implementation.

Table 7. Students Result for Questionnaire

No	Aspect	Question Number	Score
1	Ease of understanding aspect	1	70
2	Independence learning aspect	2	71
		3	71
		4	73
		5	72
3	Media aspect	6	77
		7	72
		8	73
Total			579
Average			72,38
Percentage			85%

Based on the table above, it can be concluded that the result of questionnaire is obtained a value of 579 with a percentage of 85% included in the “very proper” criteria. Therefore, this product is feasible to be a learning media.

The Feasibility of EPA (English Prose Application)

Based on the data that has been collected, the result of media expert validation is 85% included “very proper” criteria. While the result of material expert validation is 92% included “very proper” criteria. Then, the result of students response is 85% included “very proper” criteria. All of the form of feasibility scores from experts and

also students, it can be seen that EPA (English Prose App) is suitable for use as learning media. This media can be used as a tool to understand prose material.

Beside fill out the questionnaire about the feasibility of the product, the students also doing exercise. Filling out the exercise conducts in implementation phase. This exercise is used to determine the students performance and see the results of the students achievement. The result of student exercise is 7524,94 points. The total correct answer is 45,59%. While the total incorrect answer is 54,41%. From the result it can be seen that the students understand enough about the material of Prose. The correct answer is smaller than incorrect answer, because when the researcher conducts a trial, researcher only teach one material, namely “The Importance of Teaching Prose” material. Meanwhile, the exercise is included all of the material, thus, the total incorrect answer is bigger than correct answer.

CONCLUSION AND SUGGESTION

Based on the results of the research and development of learning media above, it can be concluded that this research produces a product in the form of an Android-based learning media application for the *Basic Analysis of Prose*. This product contains *Basic Analysis of Prose* materials and quizzes. This study uses the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model developed by Dick and Carey (1996).

The first stage is analysis, at this stage the researcher distributes questionnaires to analyze student needs and make direct observations in class. Therefore, researcher found problems in the learning process. During the lesson, there were some students who did not pay attention and talked to their classmates. The second stage is design, at this stage the researcher designs the initial product. Starting from making display designs, materials, quizzes and selecting the appropriate images.

The third stage is development, at this stage, the researcher creates an assessment instrument for material and media experts. After that, researcher revises and develops products according to suggestions from experts.

The fourth stage is implementation, at this stage, the researcher tests the product in the classroom. At the time of product implementation, there were 17 students who participated. The students looked more enthusiastic and gave a good response to the learning media. The final stage is evaluation, at this stage, the researcher evaluates the product using formative and summative evaluation. Researcher uses summative evaluation because it is to determine student achievement. While formative evaluation aims to determine the feasibility of the product, not the effectiveness of the product.

Products that have been made by researcher are suitable for use as learning media based on the assessment of the validators and student responses. The validation results obtained from media experts were 85% with the criteria “very proper”, from material experts 92% with the criteria “very proper”. While the results of student responses obtained a percentage of 85% with the “very proper” criteria. That means this product is suitable for use as a learning media.

In making a product for learning media, the educators must be able to utilize technology to support the learning process. The researcher provide suggestions for future researchers, to be able to carry out further and in-depth research by providing more material and questions for students, to increase a deeper understanding.

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