

THE DEVELOPMENT OF "ACCESS" ANDROID BASED LEARNING MEDIA IN THE ACCOUNTING CYCLE MATERIAL

PENGEMBANGAN MEDIA PEMBELAJARAN "ACCESS" BERBASIS ANDROID PADA MATERI SIKLUS AKUNTANSI

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Abstrak

Penelitian ini bertujuan untuk menghasilkan Media Pembelajaran "Access" Berbasis Android dalam Siklus Akuntansi Perusahaan Jasa untuk membantu siswa dalam pembelajaran akuntansi. Ini adalah jenis Penelitian dan Pengembangan yang mencakup empat langkah, yaitu: *Analysis, Design, Development, dan Implementation*. Kelayakan media pembelajaran dinilai oleh ahli materi, ahli media, praktisi pembelajaran akuntansi dan siswa dengan menggunakan angket. Data penelitian kuantitatif dianalisis dengan teknik analisis deskriptif kuantitatif. Produk penelitian ini berupa media pembelajaran aplikasi *android*. Media tersebut meliputi materi, soal, dan permainan. Hasil penelitian ini menunjukkan; (1) Pengembangan media pembelajaran "Access" berbasis *android* melalui 4 tahapan yaitu: Analisis, Perancangan, Pengembangan, dan Implementasi. (2) Pengembangan media pembelajaran "Access" berbasis *android* berdasarkan evaluasi ahli: a) Ahli materi mendapat skor 3,66 dengan kategori "Sangat Layak", b) Ahli media mendapat skor 2,89 dengan kategori "Layak", c) Praktisi pembelajaran akuntansi memperoleh skor 3,79 dengan kategori "Sangat Layak". (3) Penilaian siswa terhadap media memperoleh skor rata-rata 3,46 dengan kategori "Sangat Layak". Media Pembelajaran "Access" Berbasis *Android* yang dikembangkan menunjukkan sangat layak sebagai media pembelajaran.

Kata Kunci: Media Pembelajaran, *Android*, ADDIE.

Abstract

This research is intended to produce "Access" Android Based Learning Media in The Service Company Accounting Cycle to help student in accounting learning. This is a Research and Development type of research that includes four phases, namely: Analysis, Design, Development, and Implementation. The feasibility of the learning media was assessed by material expert, media expert, accounting learning practitioner and students, using questionnaires. The quantitative research data were analyzed using the quantitative-descriptive analysis technique. The final product of this research is a learning media in the form of Android Application. The media includes material, questions, and game. The results of this research indicate; (1) "Access" android-based learning media development through 5 phases, they were: Analysis, Design, Development, and Implementation. (2) The development of "Access" android based learning media on expert evaluation: a) Material expert got score 3,66 with "Very feasible" category, b) Media expert got score 2,89 with category "Feasible", c) Accounting learning practitioner got score 3,79 with the category "Very Feasible". (3) Student's assessment

to media got average score 3,46 with the category “Very feasible”. The developed “Access” android-based learning media shows that it is very feasible as the learning media.

Keywords: Learning Media, Android, ADDIE.

INTRODUCTION

Education is the most important part of human life and is the main aspect of creating quality human resources. The more attention given by the government to the education sector is expected to be able to achieve the goals of the Indonesian nation as stated in the preamble to the 1945 Constitution, namely to educate the nation's life. Based on the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, it is stated that

Pendidikan nasional berfungsi mengembangkan kemampuan dan membentuk watak serta peradaban bangsa yang bermartabat dalam rangka mencerdaskan kehidupan bangsa, bertujuan untuk berkembangnya potensi peserta didik agar menjadi manusia yang beriman dan bertakwa kepada Tuhan Yang Maha Esa, berakhlak mulia, sehat, berilmu, cakap, kreatif, mandiri, dan menjadi warga negara yang demokratis serta bertanggung jawab.

National education must also improve its quality so that the functions and objectives of national education can be realized. One important factor that supports improving the quality of education is the learning process. Learning is one part of education, namely a process that encourages students and learning resources to carry out learning activities (Law of the Republic of Indonesia Number 20 of 2003). According to the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, learning is a process of interaction between educators and students and learning resources in a learning environment. One of the supporting factors for the achievement of learning objectives is learning media.

Learning media is an intermediary, container or tool to connect learning messages. Learning media are all tools and materials that can be used to achieve educational goals (Sanjaya, 2014: 163). Media is very useful and useful in the process of education because with learning media the learning process is more directed, managed, organized and has guidelines according to educational goals (Indriyani, 2019). Learning media can allow direct interaction between participants and their environment. Also, learning media has a role in capturing particular objects or events and increasing students' enthusiasm for learning.

The role of the media in the learning method is an effort to improve the process of interaction and communication between teachers and students as well as interactions between students and their learning environment. Based on Susilana & Riyana (2008: 8), "the development of learning media does follow the development of educational technology". Accounting subjects are subjects that require media in the delivery of the material -required learning media so that students understand and know how to practice the accounting material being studied.

Vocational High Schools are formal educational institutions equivalent to Senior High Schools or Madrasah Aliyah. SMK Negeri 1 Pengasih, located at Jalan Kawijo No. 11 Pengasih, Kulon Progo is also a Vocational High School with 6 expertise programs, namely Office Administration, Hospitality Accommodation, Institutional Financial Accounting, Boutique Clothing, Multimedia and Marketing. Based on observations made by researchers on May 20, 2020 through questionnaires that have been filled in by respondents, data was obtained that 70% of accounting learning activities use the discussion method and 30% of accounting learning activities use conventional methods. However, the use of learning media in accounting learning methods is still less varied because it only uses sourcebooks, whiteboard, and PowerPoint.

Learning media is an important factor in the ongoing teaching and learning activities at SMK Negeri 1 Pengasih. Based on observations made by researchers on May 20, 2020 through questionnaires that respondents have filled in, data was obtained that 100% of students are more interested in the material when using various learning media, where 95,5% of students are more interested in using digital based learning media than analog based learning media. However, the use of media is still considered less varied by students so that it makes students less interested in the material. Also, not all of the media used can be studied anywhere and anytime except books or e-books. Unfortunately, books or e-books do not attract students' interest. Students are more interested if accounting material is packaged in an application that also presents a game in it.

This research was conducted in 10th Grade AKL 1, which has an average score lower than 10th Grade AKL 2. Supported by the results of observations made on May 20, 2020, the respondent's questionnaire shows that 100% of X AKL 1 students have a smartphone where 86,4% of students often use smartphones, but 81,2% of students use smartphones for non-learning activities. Based on the observation, the researchers are interested in making accounting learning media that are creative, innovative, interactive, and can be studied anywhere and anytime and can help students understand the material. The learning media that will be developed are learning media in the form of an "Access" Android Based Learning Media.

"Access" stands for Accounting Guess which is an Android-based learning media application. Based on Jengathe and Rojatar (2015) describe how android operation system provide efficient of learning and uses of this in education system and any instructional information can be accessed by an android application from any location at the student's convenience. The "Access" application contains material on Service Company Accounting Cycles and educational games on word or number structure. This game model was chosen because according to research conducted by Sulistyarningsih (2013) it can be concluded that the implementation of cooperative learning model type arranging letters such as the Hangaroo game can improve Accounting learning activities in 10th Grade AK 3 SMK YPKK 2 Sleman Academic Year 2012/2013. The purpose of the "access" provide a choice of learning media for teachers so that the learning process runs more interestingly and can motivate and stimulate students to be active in learning. In Addition, learning media based on android educational games expects to provide satisfaction for students in accessing and understanding.

This research seeks to develop learning media to increase the variety of instructional media that can attract students' interest in service company accounting cycle material. Wahid (2018) educational media is important in improving student learning achievement. Educational and learning media can be useful as a means of delivering uniformed subject matter, the learning process becomes clearer and more interesting, the learning process becomes more interactive, efficient in time and effort, and improves the quality of student learning outcomes.

METHODS

Type of Research

The research method employed in this study was Research and Development (R&D). Research and Development is a research method for creating a specific product and test the effectiveness of these products Sugiyono (2008: 407). This study aims to develop Android-based learning media. The procedure and development stage used is the ADDIE model developed by Dick and Carey (1996) in Mulyatiningsih (2013: 199), which consists of Analysis, Design, Development, Implementation, and Evaluation.

Place and Time of Research

This research was conducted between Juni 2020 to February 2021 in SMK Negeri 1 Pengasih, Jalan Kawijo No.11 Pengasih, Kulon Progo.

Subject and Object of Research

These research subjects were material experts, media experts, subject teachers, 12 students of 10th Grade AKL 2 SMK Negeri 1 Pengasih, and 35 students of 10th Grade AKL 1 SMK Negeri 1 Pengasih. At the same time, the object in this study is the feasibility of learning media applications "Access" based on android in accounting learning.

Research Procedure

The research procedure for "Access" Android Based Learning Media Development uses the ADDIE development model (Dick and Carey, 1996). ADDIE stands for Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model is one of the learning system design models that shows the basic stages of a learning system that is easy to do (Cahyadi, 2019). But this research only reached the implementation stage. This is because media research is only assessed to the extent of the feasibility of the media by material experts, media experts, accounting learning practitioners, and students.

Data Collecting Instrument

The instrument used to collect data was a questionnaire. According to Sugiyono (2008: 199), a questionnaire is a data collection technique done by giving a set of questions or written statements to respondents to answer. The questionnaire instrument in this research uses data from material experts, media experts, teachers, and students to determine the feasibility of the media and as an evaluation material in media development.

The media feasibility instrument in this study uses a modification Likert scale with 4 alternative answers, namely: very feasible = 4, feasible = 3, less feasible = 2, and not feasible = 1. The questionnaire uses to measure media development's feasibility in terms of the material's relevance, material organization, evaluation/question exercises, language, software engineering, and visual appearance. The questionnaire used in this development research was to obtain data from media experts, material experts, and students. As a material for evaluating the developed learning media.

Data Analysis Technique

In this research, the researchers used quantitative descriptive analysis of material expert, media expert, accounting learning practitioner, and student responses from closed questionnaires that will distribute and filled in. A qualitative descriptive data analysis will then analyze comments and suggestions from material expert, media expert, and accounting learning practitioner. Comments and suggestions use for consideration and improvement in the development of the "Access" application.

In assessing the feasibility of the media, the next steps that can take are as follows:

- a. Calculate the average value of the whole and every aspect with the formula:

$$\bar{x} = \frac{\sum x}{n}$$

Description:

\bar{x} = Average Score

$\sum x$ = Total Score

n = Total Test Subject

Source: Ernawati & Sukardiyono (2017:207)

- b. Beased on the calculating of the average score, it can be classified as follows:

Table 1 The Conversion Formula for The Mean Number of Scores

Formula	Range	Classification
$x \geq Mi + 1,5 SDi$	4 – 3,25	Very Feasible
$Mi + 1,5 SDi > x \geq Mi$	3,25 – 2,5	Feasible
$Mi > x \geq Mi - 1,5 SDi$	2,5 – 1,75	Less feasible
$x \leq Mi - 1,5 SDi$	1,75 – 0	Not feasible

Description:

Average ideal score (Mi) = $\frac{1}{2}$ (maximum score ideal + minimum score ideal)

Ideal standar deviation (SDi) = $\frac{1}{2}$ (maximum score ideal – minimum score ideal)

Actual score (x) = score obtained

Source: Lukman & Ishartiwi (2014:112)

In addition to the table 1 criteria, the overall product eligibility criteria can be determined by multiplying the assessment score by the number of indicators measured in each aspect assessed. For further analysis, such as comparing the results of the assessment of each aspect with the expected level of feasibility, percentage techniques are used in analyzing data with the formula:

$$\begin{aligned} \text{The percentage of Feasibility for} \\ \text{each aspect (\%)} &= \frac{\sum \text{the average scrc obtained}}{\sum \text{average score ideal}} \times 100\% \end{aligned}$$

Source: Ernawati & Sukardiyono (2017:207)

To determine whether the quality of the media product development is feasible, the researcher uses the minimum assessment criteria, including the "Feasible" category. If the assessment of learning media gets a minimum score of "Feasible", then the media developed is "Feasible" to be used as a learning media (Ernawati & Sukardiyono, 2017:207)

RESULT AND DISCUSSION

Development of “Access” Android Based Learning Media

Dick and Carey established the ADDIE development model, which was applied in this research (1996). The five steps of the ADDIE development paradigm are analysis, design, development, implementation, and evaluation. However, in this study, it is only up to the level of implementation. The following is a discussion on the evolution of media:

1. Analysis

The analysis stage began in May 2020 by analyzing student needs. The results of the analysis show that students are more interested in using various learning media. However, so far learning is still often carried out conventionally with less varied learning media. This is evidenced by observations that show 70% of accounting learning activities use the discussion method, and 30% of accounting learning activities use conventional methods and use less varied learning media such as power points, e-books, and whiteboard. Meanwhile, 100% of students prefer learning with varied learning media, and 95,5% prefer digital-based learning media.

The observation results also showed that 100% of students had smartphones, and 86,4% often used smartphones. However, but 81,2% of students often used them for non-learning activities. From the results of these observations, the researcher wants to develop Android-based learning media that can be used anytime and anywhere to help students better understand the material.

In addition to analyzing student needs, researchers also conducted basic competency analysis and core competency analysis. Analysis of Core Competencies and Basic Competencies is used to determine the material to be included in the "Access" application. The material in Basic Accounting Subjects in 10th Grade focuses on the accounting cycle of service company material. Based on the syllabus analysis, the material to be used in the development of this media is the Service Company Accounting Cycle, from preparing the accounting cycle in service companies to the closing of the accounting cycle in service companies.

2. Design

At this stage, the researcher began to compile the materials needed for media production. First, the researcher compiles the material obtained from various learning sources. The material contained in this media is compiled from various references, and Competency Standards and Basic Competencies are reviewed following the applicable curriculum guidelines in schools, namely the 2013 curriculum. Then the researcher will arrange practice questions, material based on lesson plan, and questions in the game in Microsoft Word. In the application "Access", there are two types of questions: questions in the game and practice questions in the material. The questions in the game function as evaluation questions after studying the material, while the practice questions function to train students' abilities after reading the material provided. The discussion questions consisted of 3 questions, and the questions in the game consisted of 15 questions. After that, the researchers made a storyboard that aims to make media creation easier. The storyboard is also designed to be attractive and straightforward to make it easier for students to use the application so that there are no complaints from students. Besides, researchers also compiled media feasibility assessment instruments by material experts, media experts, accounting learning Practitioner, and students. The media assessment questionnaire serves to collect data that will later be analyzed to determine the media's feasibility.

3. Development

The learning media for the "Access" application is based on a pre-designed storyboard. In this process, the Eduraya team assisted the researcher in art design and content programming in the media. In making the media, the researchers only focused on making the storyboard and the drafter.

At this stage there are 3 validation, namely:

- a) Material expert got score 3,66 with category "Very Feasible".

Table 21 Recapitulation of "Access" Android Based Learning Media Validation Results by Material Experts

Number	Aspect of The Assessment	Total Score	Average Score	Category
1.	Question	32	3,56	Very Feasible
2.	Material	33	3,3	Very Feasible
3.	Language	8	4	Very Feasible
4.	Implementation	19	3,8	Very Feasible
Overall Value			3,66	
Media Feasibility Category			Very Feasible	

Source: Processed Quantitative Data

Based on the data in the table 2, it can be seen that the average score (x) for all aspects of the assessment is 3,66, which lies in the range of 3,25 – 4,00 and states that the product developed gets the category “**Very Feasible**”

- b) Media expert validation got score 2,89 with category “Feasible”.

Table 3 Recapitulation of “Access” Android Based Learning Media Validation Results by Media Experts

Number	Aspect of The Assessment	Total Score	Average Score	Category
1.	Software Engineering	34	3,09	Feasible
2.	Visual Appearance	36	2,57	Feasible
3.	Language	6	3	Feasible
Overall Value			2,89	
Media Feasibility Category			Feasible	

Source: Processed Quantitative Data

Based on the data in the table 3, it can be seen that the average score (x) for all aspects of the assessment is 2,89, which lies in the 2,5 – 3,25 range and states that the product developed is in the “**Feasible**” category.

- c) Accounting learning practitioner validation got score 3,79 with the category “**Very Feasible**”.

Table 42 Recapitulation of “Access” Android Based Learning Media Validation Results by Accounting Learning Practitioner

Number	Aspect of The Assessment	Total Score	Average Score	Category
1.	Material	31	3,88	Very Feasible
2.	Question	34	3,78	Very Feasible
3.	Language	8	4	Very Feasible
4.	Implementation	18	3,6	Very Feasible
5.	Software Engineering	20	4	Very Feasible
6.	Visual Appearance	21	3,5	Very Feasible
Overall Value			3,79	
Media Feasibility Category			Very Feasible	

Source: Processed Quantitative Data

Based on the data in the table 4, it can be seen that the average score (x) for all aspects of the assessment is 3,79, which lies in the range of 3,25 – 4,00 and states that the product developed gets a “**Very Feasible**” category.

Experts and practitioner revisions are made to minimize errors in the "Access" application to be suitable for use. The following are the results of revisions made by Material Experts, Media Experts, and Accounting Learning Practitioner:

- 1) Material Expert

Based on the media feasibility assessment sheet, the material expert provided several suggestions for improvements for Android-based learning media "Access", namely:

- a) The choice of the background colour is replaced with a non-contracting colour combination so that it is comfortable to look at.

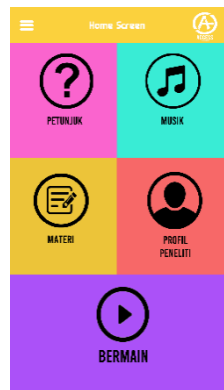


Figure 2 Main Menu Before Revision

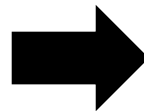


Figure 1 Main Menu After Revision

- b) On the splash screen page, a title is added regarding the Service Company Accounting Cycle material.

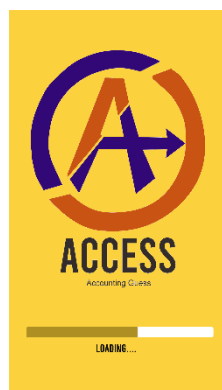


Figure 3 Splash Screen Before Revision

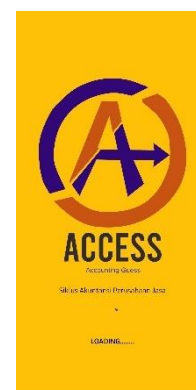
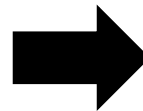


Figure 4 Splash Screen After Revision

- c) Please correct typos and paragraph layouts.
Researchers have improved the paragraph layout and numbering of the material.
- d) In the instructions section added information about the game time.
At first, the instructions section was not given information about the time, then the researcher added information on the processing time, which was 10 minutes.
- e) Add practice questions to games questions.
Practice Questions have been added to the game's questions, from only 3 questions to 8 questions.
- 2) Media Expert

Based on the media feasibility assessment sheet, media experts provide several suggestions for improvements for Android-based learning media "Access", namely:

- a) Do not repeat the "Materi" menu in the "Materi" menu.
In order not to repeat the term "Materi", the Main Menu section of the "Materi" menu is changed to the "Belajar" menu.



Figure 6 Material Menu Before Revision

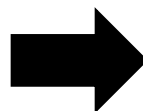


Figure 5 Material Menu After Revision

- b) Use page numbering if necessary.



Figure 7 Numbering Before Revision

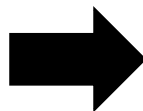


Figure 8 Numbering After Revision

- c) Incorporate the exercise menu into each material.
Each material has added an exercise button which, if clicked, will be connected to the quiz on the google form.



Figure 9 Exercise Menu Before Revision

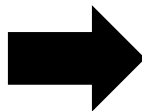


Figure 10 Exercise Menu After Revision

- d) Please pay attention to the appearance of the table that is presented, make sure it is neat and can use a smaller font.

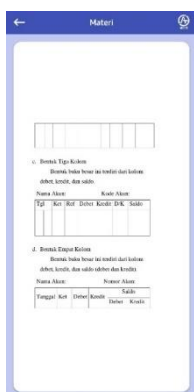


Figure 11 Table Before Revision

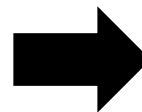


Figure 12 Table After Revision

- e) Need to reduce the size of the application again.
The size of the application cannot be reduced anymore due to the limitations of the programmer.
- f) Use transitions such as an open book or the like for materials.
The transition cannot be used because Android no longer supports Adobe Flash.
- g) Present worksheets for user interaction in practice questions.
Presentation of worksheets for user interaction in question exercises will increase the size of the application. Therefore, there are additional practice questions at the end of each material that can be done using google form.
- h) Present a display of feedback on the work of the user.
Display feedback on practice questions for each material in the form of scores from the results of quiz work via google form.
- i) Use the distinction between true and false notes as feedback.
A sound in the game menu to distinguish between correct and wrong answers has been added.

3) Accounting Learning Media

Based on the media feasibility assessment sheet, accounting learning Practitioner provide remission, namely clarifying music in the application.

4. Implementation

After obtaining validation results from experts and making revisions, the next stage is implementation trials on students. The implementation stage was carried out in 10th Grade AKL SMK Negeri 1 Pengasih by conducting the individual trial, small group trial, and field research. The trials should have been done in the classroom, but due to the Covid-19 pandemic, the trials were conducted online by distributing an online media feasibility assessment questionnaire. The trial subjects consisted of 3 students X AKL 2 as individual trial respondents, 9 students X AKL 2 as small group trial respondents, and 35 students X AKL 1 as field research respondents. The results of the student assessment show that Android-based learning media "Access" is very suitable for use as a learning media for service company accounting cycles. This media able to improve the understanding the material such as the trial students (3,37), the small group (3,49) and field research (3,54). The score has increased and the results show a very feasible for this research. This media feasible to used as learning media.

The Feasibility of "Access" Android Based Learning Media Application Based on Material Expert, Media Expert, and Accounting Learning Practitioner

The feasibility of "Access" Android Based Learning Media can be identified through assessments provided by material experts, media experts, and accounting learning practitioner. The results of the validation of the experts on the feasibility of "Access" application got an average of 3.44 which included in the "Very Feasible" category. Here is a more complete explanation:

1. Material Expert

The material feasibility of "Access" Android Based Learning Media receives an average score of 3,56, placing it in the Very Feasible category. The question aspect gets average score 3,3, which is included in the Very Feasible category. The language aspect gets average score 4, which is included in the Very Feasible category. The implementation aspect gets average score 3,8, which is included in the Very Feasible category. According to the findings of the material expert's evaluation, "Access" Android Based Learning Media received an average score of 3,66, placing it in the Very Feasible category. The "Access" android-based learning media application, according to the material expert, is very feasible to use as a learning media for vocational school students.

2. Media Expert

The Feasibility of "Access" Android Based Learning Media on the software engineering aspect gets average score 3.09, which is included in the Very Feasible category. In the visual element of the presentation, the feasibility of "Access" Android Based Learning Media has an average score of 2,57, which is included in the Feasible category. In the linguistic aspect, the feasibility of "Access" Android Based Learning Media received an average score of 2,89, placing it in the Feasible category. The "Access" android-based learning media application, according to the media expert, is feasible to use as a learning media for vocational school students.

3. Accounting Learning Practitioner

The feasibility of "Access" Android Based Learning Media in the material aspect get average score 3,88, which is included in the Very Feasible category. The question aspect gets average score 3,78, which is included in the Very Feasible category. The language aspect gets average score 4, which is included in the Very Feasible category. The implementation aspect gets average score 3,6, that included in the Very Feasible category. The software engineering aspect gets average score 4, which is included in the Very Feasible category. The visual aspect of displaying gets average score 3,5, which is included in the Very Feasible category. Based on the assessment of accounting learning practitioner, "Access" Android Based Learning Media obtained an average score of 3,79 that included in the Very Feasible category. According to the accounting learning practitioner, the "Access" android based learning media application is very feasible to be used as a learning media for vocational school students.

Student Assessment for Feasibility of “Access” Android Based Learning Media

Student Assessment for Feasibility of “Access” Android Based Learning Media consists of individual trial, small group trial, and field research. Following are student assessment of trial and field research:

1. Individual Trial

The feasibility of "Access" Android Based Learning Media in the software engineering aspect gets average score 3,33, which is included in the Very Feasible category. The aspect of learning design gets average score 3,26, which is included in the Very Feasible category. The aspect of visual communication gets average score 3,56, which is included in the Very Feasible category. Based on the assessment of students through individual trial, the overall “Access” Android Based Learning Media obtained a mean score of 3,37, which is considered very feasible. According to the individual trial, the "Access" android based learning media application is very feasible to be used as a learning media for vocational school students

Table 3 Individual Trial Recapitulation

Number	Aspect of The Assessment	Total Score	Average Score	Category
1	Soft Engineering	30	3,33	Very Feasible
2	Learning Design	88	3,26	Very Feasible
3	Visual Communication	64	3,56	Very Feasible
Overall Value			3,37	
Media Feasibility Category			Very Feasible	

Source: Processed Quantitative Data

2. Small Group Trial

The feasibility of "Access" Android Based Learning Media in the software engineering aspect gets average score 3,59, which is included in the Very Feasible category. The aspect of learning design gets average score 3,43, which is included in the Very Feasible category. The aspect of visual communication gets average score 3,52, which is included in the Very Feasible category. Based on the assessment of students through small group trial, overall the "Access" Android Based Learning Media obtained a mean score of 3.49, which is considered very feasible. According to the small group trial, the "Access" android based learning media application is very feasible to be used as a learning media for vocational school students.

Table 4 Recapitulation of Small Group Trial

Number	Aspect of The Assessment	Total Score	Average Score	Category
1	Soft Engineering	97	3,59	Very Feasible
2	Learning Design	278	3,43	Very Feasible
3	Visual Communication	190	3,52	Very Feasible
Overall Value			3,49	
Media Feasibility Category			Very Feasible	

Source: Processed Quantitative Data

3. Field Research

The Feasibility of "Access" Android Based Learning Media in the software engineering aspect gets average score 3,56, which is included in the Very Feasible category. The visual display gets average score 3,53, which is included in the Very Feasible category. The visual aspect of the visual display gets average score 3,54, which is included in the Very Feasible category. Based on the assessment of students through field research, the overall "Access" Android Based Learning Media obtained a mean score of 3,54, which is considered very feasible. According to the field research, the "Access" android based learning media application is very feasible to be used as a learning media for vocational school students.

Table 5 Recapitulation of Field Research

Number	Aspect of The Assessment	Total Score	Average Score	Category
1	Soft Engineering	374	3,56	Very Feasible
2	Learning Design	1112	3,53	Very Feasible
3	Visual Communication	744	3,54	Very Feasible
Overall Value			3,54	
Media Feasibility Category			Very Feasible	

Source: Processed Quantitative Data

Previous research from Latifah (2019) and Indariyati (2019) on the development procedures used both use the ADDIE development model. Another similarity found in this study is the products produced based on android with service company cycle material. Based on Latifah (2019) developed the Learning Media for Accounting Crosswords and Indariyati (2019) developed the "Find Me Accounting" Learning Media while this research developed the Learning Media "Access". Putra (2016) results showed that the feasibility level of android-based educational games as an accounting learning media and developed educational games "Asah Akuntansi". Febriana and Aghni (2019) results showed the feasibility level of "Eccapy" media based on the assessment of media experts it can be categorized as feasible, material experts can be categorized as very feasible, and learning practitioners can be categorized as feasible. While the media feasibility assessment based on user responses shows the very feasible category. In addition, Lubis and Elvianti (2018) developed an android-based accounting learning media with the "AKSI (Asah Akuntansi)" application. This android-based application is feasible to be used as a medium for learning accounting. The results of the research are in line with this research.

CONCLUSION

Based on the results of research and discussion analysis, it can be rejected that:

1. Development of "Access" Android Based Learning Media on Service Company Accounting Cycle Materials using the ADDIE development model, there are analysis, design, development, implementation, and evaluation. However, in this research, it is only up to the implementation stage.
2. Feasibility of "Access" Android Based Learning Media on Service Company Accounting Cycle Material based on the assessment of material experts, media experts, and accounting learning Practitioner obtained an average score of 3,43, which indicates that "Access" Android Based Learning Media on Service Company Accounting Cycle Material very feasible to be used as an accounting learning media.
3. Student responses to the appropriateness of "Access" Android Based Learning Media on Service Company Accounting Cycle Material get a mean score of 3,54, which indicates that "Access" Android Based Learning Media on Service Company Accounting Cycle Material is very feasible to be used as accounting learning media.

SUGGESTION

Based on the research and development that has been done, "Access" Android Based Learning Media on Service Company Accounting Cycle Material is still far from perfect. Therefore, there are several suggestions for further product development, there are:

1. It is better if media development can follow the ADDIE model stage following the prevailing theory, starting from the analysis stage to product evaluation so that development research can be carried out optimally.
2. It is better if the implementation is carried out in a broader scope so that the learning media can be used more widely.
3. Research should be developed to measure the level of effectiveness of instructional media.

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