The Development of Android-Based Arabic Language Environmental Materials in Ma'had 'Aly Syekh Sulaiman Arrasuli Agam West Sumatra

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ABSTRACT

The aim of this research was (1) to fulfill the need for Android-based Bi`ah Arabiyah Material, (2) to ensure the suitability of Android-based Bi'ah Arabiyah Material, and (3) to test the practicality of Android-based Bi'ah Arabiyah Material. The research method used is 4D model R&D research through four stages, namely defining, designing, developing and disseminating. The research that the researcher conducted only reached the 3 D stages, namely Define, Design, Develop. The results of this research are that the test subjects in this research were 12 first semester students using Aiken V with a minimum validity and practicality value of 71. Quantitative descriptive data analysis techniques are employed in qualitative data analysis methods. The results of the research show that material designed using Android can be used and applied in Ma'had 'Ali Syekh Sulaiman Araasuli Agam, West Sumatra, with language validation provisions with a score of 92.5, while for material validation with a score of 84.6 and for media validation with a score of 86.6 so that under these conditions the material designed is suitable for dissemination.

Keyword — Android Apps; Arabic; Language Environment

مستخلص البحث

المشكلة الرئيسية في هذا البحث هي مساعدة المعلمين في تقديم المواد التعليمية لجعلها أسهل وأكثر متعة للطلاب. الأداة التي تم تطويرها هي في شكل مواد بيئية عربية المبنية على نظام أندرويد. هذه المادة صالحة وعملية للطلاب في معهد علي سيخ سليمان أراسولي أغام، غرب سومطرة. أهداف هذا البحث هي (١) الحاجة إلى مادة بيئة عربية المبنية على نظام أندرويد للمهاسانتري في معهد علي سيخ سليمان أراسولي أغام غرب سومطرة، (٢) جدوى مادة بيئة عربية المبنية على نظام أندرويد للطلاب في معهد علي شيخ سليمان أراسولي غرب سومطرة، و (٣) التطبيق العملي لمواد بيئية عربية المستندة إلى أندرويد للطلاب في معهد علي شيخ سليمان أراسولي أغام غرب سومطرة. طريقة البحث المستخدمة هي البحث والتطوير (البحث والتطوير) للنماذج رباعية الأبعاد من خلال أربع مراحل للتعريف والتصميم والتطوير والنشر. البحث الذي قام به الباحث كان في مراحل ثلاثية الأبعاد فقط وهي التحديد والتصميم والتطوير. وكانت مواضيع الاختبار في هذا البحث ١٢ طالبا من الفصل الدراسي الأول. أدوات جمع البيانات في هذا البحث هي ورقة الصلاحية وورقة التطبيق العملي. تستخدم تقنية تحليل البيانات الكمية في هذا البحث Aiken V مع حد أدنى من الصحة والتطبيق العملي يبلغ ٧١. وتستخدم تقنية تحليل البيانات النوعية تقنيات تحليل البيانات الوصفية الكمية. تظهر نتائج البحث أن المواد المصممة باستخدام أندرويد يمكن استخدامها وتطبيقها على معهد علي سيخ سليمان أراسولي أغام، غرب سومطرة، بشرط أن يكون التحقق من صحة اللغة بدرجة ٩٢٫٥، بينما للتحقق من صحة المواد يكون بدرجة ٩٢٫٥. تبلغ ٨٤٫٦ وللتحقق من صحة الوسائط تبلغ ٨٦٫٦، لذا في ظل هذه الظروف، تكون المواد المصممة باستخدام أندرويد مناسبة للتوزيع.

كلمات أساسية — تطبيقات أندرويد؛ اللغة العربية؛ البيئة اللغوية

INTRODUCTION

Education is a place to study knowledge that is very useful for the development of the country in the future. Education as an activity that takes place continuously is like a cycle that has no stopping point (Wijaya, 2020). A person who is already in an education program is a hope for the country. This is said because people who have knowledge are considered as intelligent people and have broad insights from all aspects (Permatasari, 2015; Zubaidah, 2010). In addition, people also assume that a student also has a good character, so there is no need to doubt it.

The development of the times from time to time has changed the order of human life (Fatmawati, 2020; Marpaung, 2018). Compared to the past, today's times are much different (Sujati, 2018). In the past, all work was done manually by utilizing only labor and thought. In today's millennial age, none of that is found anymore. The presence of technology changes everything (Ahmad & Nurhidaya, 2020; Muslich, 2018; Zis dkk., 2021), everything is instant and everything is made easy (Rahutami & Suwarno, t.t.). Technology is an electronic system that utilizes computer performance as its main ingredient. Technology that has been created can be used as a means of education today. As we know, in teaching today educators have utilized various forms of learning media.

Along with the advancement of globalized technology, it has affected all aspects of life in the fields of economy, politics, culture, art and even in the world of education (Jamun, 2018; Maritsa dkk., 2021; Mukhlis, 2021). Technological progress is something that we cannot avoid in this life, because technological progress will run in accordance with scientific progress. Every innovation is created to provide positive benefits for human life. Providing many conveniences, as well as a new way of doing human activities, especially in the field of information technology has enjoyed many benefits brought by innovations that have been produced in the last decade.

In the world of education, language subjects are very important to apply. One of the languages that must be studied in Islamic Education Institutions is Arabic. Arabic is a subject that is included in the curriculum of Islamic education both in Madrasah and Islamic Boarding Schools and Islamic universities (Arifai, 2018). Arabic language subject is a subject that is directed to encourage, guide, develop, and foster abilities and foster a positive attitude towards Arabic both receptive and productive which aims to master a number of maharah in Arabic (Maghfur, 2022).

Pesantren Law No. 18 of 2019 Pesantren Education is education organized by the Pesantren and is in the Pesantren environment by developing a curriculum in accordance with the peculiarities of the Pesantren based on the yellow book or dirasah islamiah with a muallimin education pattern (Telaumbanua, 2019). The

enactment of Law 18 of 2019 on Pesantren is also to ensure the implementation of Pesantren in carrying out the educational function, da'wah function, and community empowerment function (Mustofa, 2020), arrangements are needed to provide recognition, affirmation, and facilitation to Pesantren based on their traditions and distinctiveness. Therefore, a law is needed that can be used as a strong and comprehensive legal basis in the implementation of Pesantren that can provide recognition of its distinctiveness, as well as a legal basis to provide affirmation and facilitation for its development.

In the general provisions in chapter 1 article 1 of Law no.18 of 2019, there are 14 points of general provisions in which point 3 states that Kitab Kuning is an Islamic book in Arabic or other Islamic books that are a reference for the Islamic scientific tradition in Islamic boarding schools (Siti, 2021), point 5 Muadalah Education is Pesantren Education which is organized in the formal education pathway by developing a curriculum in accordance with the peculiarities of the Pesantren based on the YellowIslamic classic Book or Dirasah Islamiah with a tiered and structured muallimin Education Pattern as well as at point 6 Formal Diniyah Education is Pesantren Education which is organized in the formal education pathway in accordance with the peculiarities of the Pesantren based on the YellowIslamic classic Book in a tiered and structured manner. As well as at point 7 Ma'had Aly is Pesantren Education at the higher education level organized by the Pesantren and is in the Pesantren environment by developing Islamic studies in accordance with the peculiarities of the Pesantren based on the YellowIslamic classic Book in a tiered and structured manner (Triputro, 2022).

Based on the general provisions of the pesantren law, it can be seen that pesantren education is more dominant in learning yellow classical books. On the one hand, this has a positive impact, but on the other hand, it will have a negative impact on students' maharah kalam. As if denying maharah kalam as part of the Arabic language even though maharah kalam is a communication tool in Arabic and the essence of learning a language is communication. Because many Arabic language learning methods now prioritize reading and writing abilities above speaking skills. This study will fill the gap by focusing on the development of speaking skills.

Ma'had Aly Sheikh Sulaiman Arrasuli, which is under the auspices of the Pesantren Madrasah Tarbiyah Islamiah Candung, was designated by the Ministry of Religion on October 22, 2019 as one of the ma'had 'Aly in Agam Regency, West Sumatra. Ma'had Aly Sheikh Sulaiman Arrasuli curriculum document 95% of students master active Arabic (able to speak Arabic in everyday life) and master Qawaid al-Lughah (Nahwu, Aharaf, Mantiq, balagah). In accordance with the Decree of the Director General of Islamic Education number 5396 of 2019 concerning the permit to establish Ma'had 'Aly Sheikh Sulaiman Arrasuli Agam

West Sumatra that Ma'had 'Aly organizes academic education in the field of mastery of Islamic religious knowledge (tafaqquh fiddin) based on the yellowclassical scriptures which is organized by Islamic boarding schools with the agreement to create graduates who are experts in the field of Islamic religious knowledge (mutafaqqih fiddin) (Yusmei, 2022) and develop Islamic religious knowledge based on the yellow book.

Al-karim, it is necessary to have a discourse that will later become an operational transformation of the meeting point in the lecture system with the essence of reviving and transforming Arabic language and literature in the local treasures of Islam and contextualizing it in the contemporary context (Rachman, 2010; Rohanda, t.t.; Syabibi, 2020), without leaving the values and roots of the pesantren tradition which boils down to mastery of the yellowclassical books, as well as optimizing the best cadres of the Muslim generation who understand literature in detail and in depth and are also able to operationalize active language in Arabic kalam (Hariati, 2019). From the facts that researcher have encountered in the field, therefore, researcher want to combine maharah kalam in ma'had 'aly pesantren environment without reducing the portion for studying the yellow book by developing bi'ah 'araby combined with technological advancement products so that students who are in ma'had 'Aly boarding school besides studying the yellow book can also practice maharah kalam.

Based on the description that has been described in the background of the problem above, several problems can be identified, namely: The teaching materials used are still limited to student books in printed form which look monotonous, the media used are still limited to the blackboard, in focus, and the classroom environment, there is no electronic teaching material and students and educators need renewable teaching materials so that the process of teaching and learning activities can be varied. The purpose of this research is (1) to fulfill the need for Android-based Bi`ah Arabiyah Material for Islamic students in Ma'had 'Ali Syeikh Sulaiman Araasuli Agam, West Sumatra, (2) to ensure the suitability of Android-based Bi'ah Arabiyah Material for Islamic students in Ma 'had 'Ali Syekh Sulaiman Araasuli Agam West Sumatra, and (3) to test the practicality of Android-based Bi'ah Arabiyah Material for students in Ma'had 'Ali Syekh Sulaiman Araasuli Agam West Sumatra.

METHOD

Based on the problems and research objectives, the type of research used is development research. The product developed is in the form of android-based bi'ah araby teaching materials at Ma'had 'Ali Sheikh Sulaiman Araasuli Agam. The

development model used in this research is the 4-D development model. It consists of four stages of development, including definition (define), design (design), development (develop) and dissemination (disseminate) In this research procedure only up to the third stage, namely at the develop stage. This research development model is chosen because this model is used as the basis for developing learning devices, the description seems completer and more systematic and this model is often used in development research. This method is very effective to use because it allows researcher to design, develop and evaluate learning materials by taking into account student characteristics and learning objectives. An attractive design will guide the Android application development process to suit the needs of Ma'had 'Ali Syekh Sulaiman Araasuli's students. The research procedures that researcher uses consist of several procedures, namely: Defining Stage, Planning Stage, Development Stage, and Validity Stage.

The test subjects in this study were limited to Ma'had 'Ali Sheikh Sulaiman Araasuli Agam students with Arabic language learning using android. Learning was carried out by researcher using the Ma'had Ali environment that the researcher developed and observed by other Arabic language educators using an educator response questionnaire. The research subjects were chosen with the aim of developing Arabic language environmental materials that could be used by students at the institution. By using students as research subjects, research can obtain data and input regarding the development of Android-based Arabic language environmental materials in Ma'had 'Ali Syekh Sulaiman Araasuli Agam, West Sumatra.

The data used in this research is by using a 4D model through four stages, namely definition, design, development and distribution. The data that has been obtained will be processed later. The data used can also be quantitative data, which can be the results of evaluations of the effectiveness of the learning materials developed on student satisfaction. Meanwhile, qualitative data can be data obtained from teachers or students regarding the use of the Android-based Bi`ah Arabiyah material.

RESULTS & DISCUSSION

This research was carried out following four stages in the development of 4-D models, namely the defining stage (define), design stage (design), development stage (develop), and dissemination stage (disseminate). Due to time constraints, research on the development of android-based Arabic environmental materials (Bi'ah 'Arabiyah) is only up to the practical stage. The results of this study can be presented as follows:

Results of Problems and Needs

At the analysis stage, the main activities related to analyzing the need for the development of Arabic-language environmental materials (Bi'ah 'Arabiyah) based on Android. This stage involves needs analysis and problem identification through observation of Arabic acquisition evaluation in Ma'had 'Aly 'Ali Sulaiman Araasuli Agam, West Sumatra. Ma'had 'Aly Sulayman Araasuli has one main focus, namely Arabic Language and Literature. The curriculum developed in this focus includes the study of Arabic language and literature. Outside of lecture hours, students tend to be involved in activities related to the use of Arabic, because some of them live in dormitories located in the ma'had 'Aly neighborhood.

Based on the results of an interview conducted by researcher on June 23, 2023 with ma'had 'aly management, it was conveyed that during the lecture process, students learn various Arabic skills (such as listening, speaking, reading, and writing). In improving speaking skills, the lecturers presented various Arabic themes taken from the book "Al Arabiyah lin nasyiin" by Muhammad Ismail Shini, Nashif Mustafa Abdul Aziz, and Mukhtar Thohir Husain, as well as the book "Al 'Arabiyyah Baina Yadaik" volume 1 written by Dr. Abdurrahman Bin Ibrahim, Dr. Mukhtar Ath Thahir, and Dr. Muhammad Abdul Khaliq Muhamad. These themes are presented to students in an interesting form.

Table 1. The theme of the theme is presented as follows:

No	Arabic Title	Meaning
1	التعارف	Introduction
2	الأسرة	Family
3	السكن	Hostel
4	الحياة اليومية	Everyday life
5	الطعام والشراب	Food and drinks
6	الصلاة	Prayer
7	الدراسة	Education
8	العمل	Job
9	التسوق	Shopping
10	الجو	The weather
11	الناس والأماكن	People and places
12	الهوايات	Hobbies
13	السفر	Travel
14	الحج والعمرة	Hajj dan Umrah

15	الصحة	Health
16	العطلة	Holiday
17	المهن	Professions
18	الأمن	Peace
19	التلوث	Environmental pollution
20	الطاقة	Energy

The above material is an important instrument for lecturers to develop active Arabic. However, based on the observations of researcher, lecturers are still rigid in using material which is still mostly semi-communicative. As a result, the use of material from the book "Arabiya Baina Yadaik" outside the classroom is limited to greetings only. This greeting generally consists of "Greetings السلام/ كيف/?and "How are you "عليكم؟ الحال؟". Students are not used to using vocabulary and expressions needed in daily life in the Ma'had environment, such as talking to their lecturers, staff, or friends according to the theme studied.

On the other hand, researcher also observed that the learning process, in addition to Arabic language skills, is still passive or relies on translation methods. In this case, there are 85% of the material presented with direct translation. The use of translation methods is important for lecturers, but students who ask questions inside and outside the classroom still do not get a response in Arabic. Thus, from this data it can be concluded that the learning process and mastery of Arabic in Ma'had 'Aly has not made it possible for students to communicate actively in Arabic.

To advance Arabic practice from semi-communicative to a more communicative form, daily material based on the book "Al Arabiyah Baida Yadaik" is needed that is tailored to the daily Arabic needs of students. This view is in accordance with the results of the researcher' interviews with lecturers and students regarding the need for active Arabic use in the Ma'had 'Aly environment. Furthermore, the material "Bi'ah Arabiyah" sourced from the book "Arabiyah Baina Yadaik" is adjusted to the development of technology used by students, namely android. Most of them are used to using android. Materials developed according to the needs of the student environment can be accessed quickly by lecturers and students. Therefore, researcher develop android-based materials.

Table 2. The themes of the proposed materials are as follows:

No	Arabic Title	Meaning
1	التَّحِيَّة الْيَوْمِيَّة	Daily Greetings
2	الشكر	Thank You

3	الاعتذار	Apology
4	الاستئذان وطلب المساعدة	Ask for permission and help
5	الحالة الشخصية	Personal Status
6	المسكن	Residence
7	في الحرم الجامعي	On campus
8	فِي الْفَصْل	In the Classroom
9	إلَى الْمُكْتَبَةْ	To library
10	في مكتب الرئيس	In the Leadership Office
11	فِي الْقَاعَةِ	In the Hall
12	في المعمل	In Labor
13	الأعمال اليومية	Daily activities
14	أَيُّ يَوْمٍ... ؟	What day
15	زيارة عائلية	Family visit
16	ما هوايتك ؟	What is your hobby?
17	ما مهنتك؟	What is your profession?
18	مطعم الجامعة	Campus Restaurant
19	الْإِجْتِمَاعِ	Meeting
20	إستعداد على الإمتحان	Exam Preparation
21	صلاة الجماعة	Prayers in congregation
22	التَّسَوُّقِ	Shopping
23	وسائل التواصل الاجتماعي	Social media
24	الحمَام	Bathroom
25	ممارسة الرياضة	Sport
26	المنظمة الطلابية	Student organizations

The response from these lecturers strongly supports the development of the Arabic language environment using android. Affirmation from the lecturer that each of us needs an active Arabic application on our respective androids. The results of interviews with informants (students) stated that each of us strongly agreed with the creation of an Arabic language environment using androids. Every phrase and word needed can be presented online using a smartphone.

Then the informant also stated that some students also worked as cadre teachers at Islamic boarding schools in the ma'had 'Aly neighborhood. The development of Bi'ah 'Arabiyah material in Ma'had 'Aly is currently in dire need of an application that can be presented on Android. The smartphone of each lecturer and student is only limited to containing PDFs of Arabic books. The need for expressions and vocabulary in the student environment cannot be met quickly.

The questionnaire was given to students of the Class of 2022/2023. They

consist of 18 people. The results of the researcher' interviews that they have hope that the development of the Arabic environment using the Android model can hopefully be carried out well. Existing applications can help and facilitate the understanding of students in Arabic expressions and vocabulary needed in the midst of this 21st century education that really needs technology in the learning process. The following questionnaire of the needs of practitioner educators (lecturers) on Arabic environmental materials can be seen in Table 3.

Table 3. Student Needs Analysis Questionnaire Against Arabic applications in Android-based language environments

No.	Answer	Sum	Max Score	Percentage (%)	Category
1	Student 1	50	50	100	Totally agree
2	Student 2	50	50	100	Totally agree
3	Student 3	50	50	100	Totally agree
4	Student 4	50	50	100	Totally agree
5	Student 5	50	50	100	Totally agree
6	Student 6	50	50	100	Totally agree
7	Student 7	50	50	100	Totally agree
8	Student 8	50	50	100	Totally agree
9	Student 9	50	50	100	Totally agree
10	Student 10	50	50	100	Totally agree
11	Student 11	50	50	100	Totally agree
12	Student 12	50	50	100	Totally agree
13	Student 13	50	50	100	Totally agree
14	Student 14	50	50	100	Totally agree
15	Student 15	50	50	100	Totally agree
16	Student 16	50	50	100	Totally agree
	Average			100	Totally agree

The data above was processed via the SPSS application. And the results of this data analysis can be seen in the table below.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000[a]	1.000	1.000	.00000

a. Predictors: (Constant), X16

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1666.667	1	1666.667	.	.ᵇ
	Residual	.000	1	.000		
	Total	1666.667	2			

a. Dependent Variable: X1

b. Predictors: (Constant), X16

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.000		.	.
	X16	1.000	.000	1.000	.	.

a. Dependent Variable: X1

Based on Table 3 above, it can be understood that after researcher offer Arabic environmental applications using Android to students in learning and acquiring Arabic, from the results of the questionnaire of student needs for Bi'ah 'Arabiyah material applications using Android by 100% with the category strongly agree. Thus, it can be concluded that the application of the Arabic language environment using Android is needed by Ma'had 'Aly Arrasuly. Based on the results of the interview above, it can be concluded that Arabic students and lecturers strongly support the development of Arabic environmental applications using Android in learning and acquiring Arabic.

Student Character Analysis.

Based on the analysis that has been done, it turns out that the characteristic of students in Ma'had 'Aly 'Ali Sulaiman Araasuli is to have a passive way of learning. Therefore, students in the Ma'had 'Aly 'Ali Sulaiman Araasuli environment need an Arabic application that can help them in using Arabic expressions according to the needs of the environment.

In addition, based on the analysis of students' learning styles and understanding of Arabic, it is known that most students tend to have audio-visual learning styles. Therefore, an Android-based application is needed that can help them understand and master Arabic material better (Pujianto dkk., 2020)

Design Stage

Researcher carries out the instrument design process and e-module design along with the results of the design stage that the author did. The instruments

that the author designed to collect the following research data are validation sheets and practicality sheets. The validation sheet consists of a product validation sheet and an instrument validation sheet. The practicality sheet consists of student response questionnaire sheets, analysis of the needs of students and lecturers on android applications. At this stage, researcher design Android-based Arabic environmental materials using the Articulate Storyline application conceptually based on data obtained from analysis activities

Figure 1. Contents of Arabic Environment Material on Android

In Figure 1 above is a design image created through the Canva application. The picture explains that media in the form of android devices really help students in learning. The design displayed is attractive making it easier for students to understand lessons in Arabic. In the picture also presented images of people, Arabic writing, symbols that make it easier for students.

Development Stage

At the development stage, validation tests are carried out on products that have been developed and conduct practicality tests on the products developed. Thus, valid data is data that does not differ between the data reported by the researcher and the actual data that occurs in the object of research. If researcher make reports that are not in accordance with what happens to the object, the data is said to be invalid (Sugiyono, 2013) To obtain a valid data collection instrument, an assessment of the validation instrument must first be carried out.

The assessment of the instruments carried out consists of media instruments, the practicality of the responses of lecturers and students to learning media. The results of processing these values are depicted in the form of a pie chart which can be seen in the following figure.
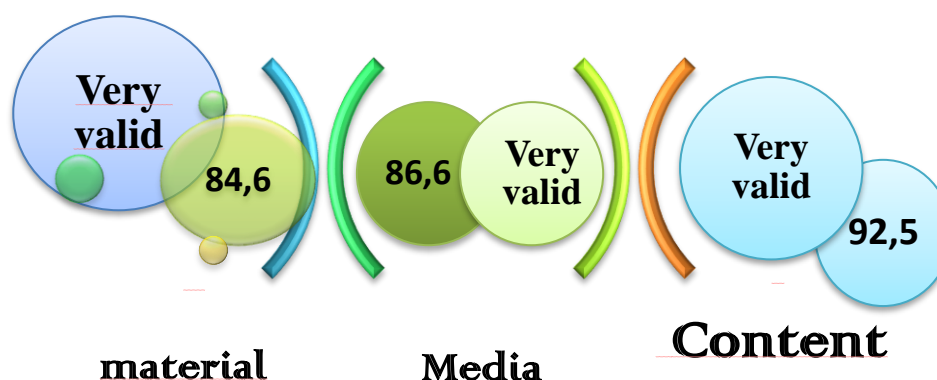
Figure 2. Percentage of Expert Assesment

Based on the figure presented above, it can be seen that the results of instrument validation (validity questionnaire) are declared very valid with an average validation value of 87.9 (percentage of 88%). This average result is obtained from the results of each aspect assessed. The aspect of language use assessment obtained a value of 92.5 or 92% with a very valid validity level. The 2nd assessment aspect of material mastery obtained a value of 84.6 or 85% with a very valid validity level. The 3rd assessment aspect of media use obtained a value of 86.6 or 87% with a Very Valid validity level.

The prototype of Bi'ah 'Arabiyah Material on Android that has been designed and which has been discussed with the supervisor is then validated by 3 validators consisting of 3 experts (material, media and content experts), the three experts are lecturers with appropriate fields and come from different universities. After validation, researcher discuss directly with validators about the validity of the prototype designed and ask validators for suggestions.

The validation results of Bi'ah 'Arabiyah Material on Android are obtained from validation carried out by 3 (three) validators. This average result is obtained from the results of each aspect assessed. The 1st assessment aspect of the Media Feasibility Aspect obtained a value of 87 or 87% with a Very Valid validity level, the 2nd assessment aspect of the content Feasibility Aspect obtained a value of 92.5 or 92% with a Very Valid validity level, the 3rd assessment aspect of the Feasibility Aspect of Material Presentation obtained a value of 80.4 or 80% with a Very Valid validity level. Furthermore, it can be displayed in the form of a pie chart contained in Figure 3.
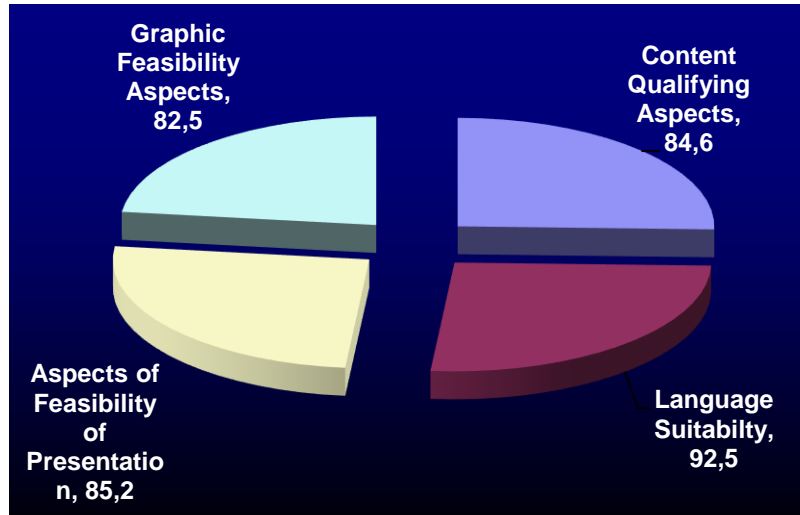
Figure 3. Result of Arabic Environment Material on android

The results of the validation of the teacher response questionnaire obtained from the assessment conducted by 3 can then be displayed in the form of a pie chart which can be seen in figure 4.
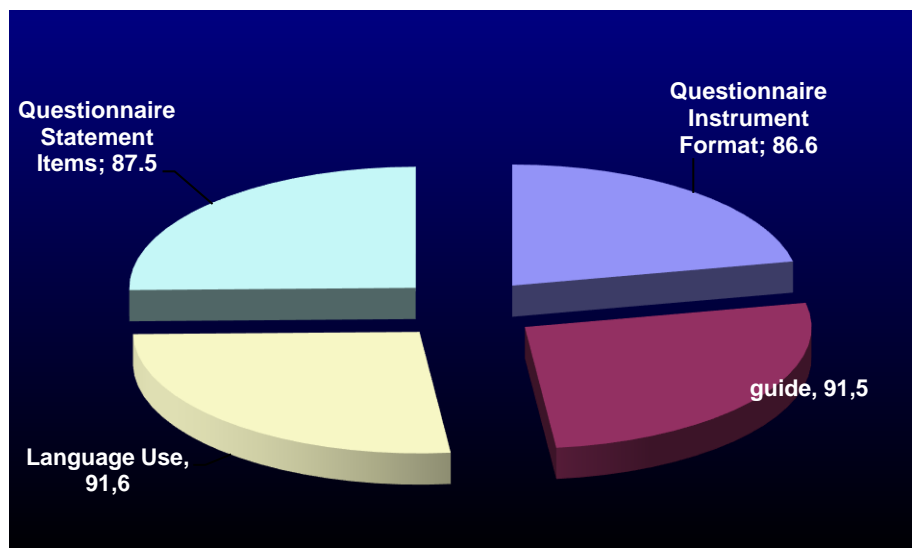

Figure 4. Validation Result of Teacher Response Questionnaire

Based on Figure 4 presented above, it can be seen that the results of the validation of the lecturer response questionnaire were declared very valid with an average validation value of 89.3 (percentage of 89%). This average result is obtained from the results of each aspect assessed. The 1st assessment aspect of the Questionnaire Instrument Format obtained a value of 86.6 or 87% with a valid validity level, the 2nd assessment aspect of the Instructions obtained a value of 91.5 or 91% with a Very Valid validity level, the 3rd assessment aspect of Language Use obtained a value of 91.6 or 92% with a Very Valid validity level,

and the 4th assessment aspect of the Questionnaire Statement Item obtained a value of 87.5 or 87% with a Very Valid validity level.

The implementation stage is carried out by applying Android-based Bi'ah 'Arabiyah material that has been developed to test the level of practicality of the Android-based Bi'ah 'Arabiyah Material that has been developed. The Android-based Bi'ah 'Arabiyah material that has been developed was tested to Mahasantri Ma'had 'Aly Ar-Rasuly Candung. The implementation stage is carried out by providing Android-based Bi'ah 'Arabiyah material to students as practitioners who will use the product in their learning. This Android-based Bi'ah 'Arabiyah material was given to 12 Ma'had 'Aly Ar-Rasuly Candung students, namely NA, DS, NH, MR, RF, RH, RZI, SF, RA, NA, SA and AS. After reading and observing the Android-based Bi'ah 'Arabiyah, students were given a questionnaire to ask for their assessment of the implementation of the Android-based Arabic environmental material that had been developed. Each student assesses Android-based Bi'ah 'Arabiyah material with different fields, while these fields are images with snippets of conversations, conversations, and Mufradat.

At this stage, the main activity is to analyze the need for the development of Android-based Bi'ah 'Arabiyah material and find out the situation that occurs in the field. At this stage, a needs analysis and problem identification are carried out. This needs analysis activity includes two activities, namely; analyzing instructional characteristics and analyzing student characteristics. In the needs analysis, researcher made observations on the implementation of Arabic language learning in Ma'had 'Aly Ar-Rasuly Candung.

Based on the results of observations made by researcher in Ma'had 'Aly Ar-Rasuly Candung during an Arabic lesson on May 16, 2023, researcher found that the material used for teaching by lecturers is still traditional. In addition, in the learning process some lecturers focus more on a few maharah only, so that students only know what is taught by the lecturer. Such as in delivering lecture material and so on.

Thus, from this data, it was found that a lecturer used minimal material. Meanwhile, judging from the characteristics of this material, it requires standard materials such as Android-based in learning because it contains audio and visual. So that from this situation a lecturer can present material that can foster independence and interest in learning students in the learning process, by using Android-Based Bi'ah 'Arabiyah Material in Arabic lessons specifically for students in Ma'had 'Aly Ar-Rasuly Candung.

Bi'ah 'Arabiyah material is based on Android among the ways of distributing e-module forms and android-based. Direct materials are created by independently designed learning material developers. Meanwhile, in making the contents in the guidebook includes the whole maharah. Equitable distribution of

skills in Arabic learning materials is an effort to determine standardized tests. This lecturer's effort as a step for students is not awkward later in learning Arabic.

After the preparation of the Android-based Bi'ah 'Arabiyah material was completed, the material was tested on a number of students. The testing activity is an integral part of the development of standardized tests. The trial is not intended to measure the performance of the students who are used as test samples, but to determine the feasibility of the Bi'ah 'Arabiyah material being tested. The results of the trial were then analyzed, which was in the form of analysis of Arabic environmental material to obtain an index of difficulty and discriminating power and calculation of the reliability index. So that Android-based Bi'ah 'Arabiyah material can be used.

At the material design stage of Bi'ah 'Arabiyah, the activities carried out are to design APKs that can be used and installed on Android phones based on data obtained from analysis activities. Designing Android-based Arabic environmental materials based on needs analysis first, then reviewing learning. Then the Android-based Arabic environment material was designed using the Articulate Storyline application and WEB 2 APK. According to Rustaman et al. in (Rosa, 2015) that the advantage of the integration learning model is that students will find it easier to find relationships because they are still within the scope of one field of study. The Articulate Storyline application is software that can be used to design interactive learning media and can also create learning media for Android and is assisted by the WEB 2 APK application. The results of (Susanti & Gunawan, 2019) stated that by using Articulate Storyline, students will be more interested in learning because the appearance of this Articulate Storyline is interesting.

Based on the results of the analysis of the assessment conducted by validators on the Android-based Arabic environmental material that has been developed, it can be seen that the Android-based Bi'ah 'Arabiyah material that has been developed is very valid with an average acquisition score of 0.88 with a percentage of 88%. The function of testing by these experts is intended so that the guidebook can be validated based on theoretical considerations and their experience as experts (Suryanda dkk., 2019) This is measured by using Aiken's V index to process validation data carried out by 3 (three) validators. The results of this data processing are then presented based on the validity level measurement table.

In addition to the results of validation carried out by validators, validators also provide little written responses regarding Bi'ah 'Arabiyah material which is made in the form of an APK that can be installed on Android phones that have been developed. In general, validators are of the opinion that the Android-based Bi'ah 'Arabiyah material that has been developed is good enough to be used in research. However, there are some things that need to be considered and slightly

revised, namely the need to make answer keys for each form of evaluation and assessment that is a written test in the guidebook. This is needed to assist students in evaluating and measuring the extent of their understanding and mastery of the material in the guidebook that has been developed. The next thing that needs to be corrected and revised is errors and errors in typing so that the presentation of language in the test manual developed is easy to understand and does not cause misunderstandings of interpretation and understanding by students and researcher themselves. This is done in order to maintain the quality of the Android-based Bi'ah 'Arabiyah material developed.

The display design and packaging of Bi'ah 'Arabiyah material is also quite attractive so that it can attract students to learn and master Arabic. This is also one of the reasons why this Android-based Arabic environment material is given a very valid assessment. Based on this, this Android-based Bi'ah 'Arabiyah material can be categorized as very valid because apart from appearance, the material designed can also increase the sensitivity and activeness of students in learning independently. In addition, this guidebook is said to be valid if the teaching material can show a condition that is in accordance with the content and construct (Arikunto, 2021)

Practicality of the Android-Based Bi'ah 'Arabiyah Material Model

Based on the results of the analysis of the assessment conducted by validators of the lecturer response questionnaire instrument, it can be seen that the lecturer response questionnaire instrument that has been developed is very valid with an average score of 0.88 with a percentage of 88%. This is measured by using Aiken's V Index to process validation data carried out by 3 (three) validators.

After carrying out the validation stage, then the researcher conducts the practicality stage to test the level of practicality of the Android that the researcher designed. In conducting practicality, researcher does two ways to collect data, namely the results of filling out student response questionnaires. Researcher has succeeded in collecting data on the results of student response questionnaires. Furthermore, researcher will discuss the results of data collection that has been carried out.

After collecting the results of the student response questionnaire as practitioners, researcher will discuss the results of the data. The questionnaire that the researcher distributes is in accordance with the grid that has been designed as attached. The grid has been discussed with supervisors and validators. The student response questionnaire (practicality questionnaire) consists of 20 points of statements that will be assessed by 12 students on August 22, 2023 at Ma'had Aly Candung. Based on the results of the teacher's response

questionnaire, it is known that the level of practicality of Android-Based Arabic Environmental Material that has been used is 87% with the Very Practical category. This is in accordance with Arikunto's opinion, that practicality is a convenience that exists in an evaluation instrument both in preparing, using, interpreting obtaining results and ease in storing them (Arikunto, 2008). This figure is measured using the practicality testing guideline table as contained in Table 3.5 in chapter 3 (three).

Referring to the data from the validity test results that have been carried out, the development of Android-based Bi'ah 'Arabiyah material shows a very valid assessment from the assessment of experts, and the results of product trials so that the Android-Based Arabic Environmental Material developed is declared suitable for use in the learning process. This is also because the process of developing Android-based Bi'ah 'Arabiyah material uses an appropriate and systematic development model so as to minimize the occurrence of errors in the development process from the beginning. The development of Android-based Bi'ah 'Arabiyah material in this development research uses a 4-D development model that goes through several stages such as the analysis, design, development stages, so that the development carried out becomes more structured. This is what causes Android-based Bi'ah 'Arabiyah material to be more effectively used in the learning process apart from the characteristics of multimedia itself.

The assessment is very valid on each indicator can be achieved because of several important points, namely from the aspect of content feasibility: indicators, basic competencies contained in the Android-based Bi'ah 'Arabiyah material developed in accordance with the learning characteristics and competencies of students, the material presented in the Android-based Bi'ah 'Arabiyah material developed is clear and interesting which is equipped with furniture material

The principles in evaluating learning media are: (1) teaching media must be in accordance with learning objectives, (2) vocabulary (3) conformity with material content, (4) suitability to various types of students (student characteristics), and (5) image or visual quality. Learning media can motivate students in the implementation of learning and are able to encourage students to achieve maximum learning outcomes. In addition, to increase the effectiveness of the use of learning media can improve the skills possessed by lecturers in mastering the use of learning media, lecturers are able to develop learning strategies that not only convey information, but encourage students to learn to use learning media, so that students will feel a positive impact from the use of learning media (Pratiwi & Meilani, 2018).

Based on these statements, it can be concluded that the clarity and linkage of indicators, basic competencies, learning objectives, material presentation,

language use, with learning objectives contained in the Android-Based Arabic Environment Material developed will be able to facilitate lecturers and students in learning so that it will have a positive impact on student learning outcomes, thus learning objectives will be achieved by maximum (Dwiqi, et al, 2020: 33-48).

The use of Android-based Bi'ah 'Arabiyah material in learning will certainly be better able to attract the attention of students so that it is easier to understand the material. This is in line with the opinion of Sitompul (2017: 141-146) which states that the use of computer-based learning media can also make learning to better remember the material studied. Based on this opinion, it can be explained that this Android-based Arabic environment material has advantages that can attract mahasntri's interest in learning independently because its use can be accessed with Android and also computers / laptops that have kept up with the times. In addition, the learning process using Android-based Bi'ah 'Arabiyah material also increases the level of focus and seriousness of students in learning because of the innovations and updates they experience and receive in the teaching process. With this innovation and renewal, the motivation of students to learn has increased.

In the Android-based Bi'ah 'Arabiyah material developed, the material presented uses simple language and is easy to understand, so that the materials in the module become clear and do not cause confusion and ambiguity as well as errors in interpretation and understanding. In addition, this guidebook also has its own advantages, including being able to be accessed repeatedly because it is available in the form of software (software software), not limited to place and time, so it can be accessed anywhere and anytime, and its use is not too complicated because it does not require a high-tech device, simply by using Android you can access this Android-based Bi'ah 'Arabiyah material. Based on the results of the response questionnaire of lecturers and students at Ma'had Aly Candung, it can be concluded that Android-based Arabic environment material that can be developed and applied in the Arabic learning process is very practical and can be used independently without restrictions on place and time.

According to the results of the data analysis that has been carried out, the quality of the product developed, namely the Android-based Bi'ah 'Arabiyah material for Arabic learning in Ma'had Aly Candung is valid and practical. This conclusion was obtained from the results of the validity and practicality test, namely the assessment given by validators with a total index of 83% with a very valid category and the teacher response questionnaire with a percentage of 88% which was categorized as very practical.

CONCLUSIONS

Based on the development of android-based Arabic environmental material as a guide for Arabic lecturers and students, it can be concluded as follows: a). The results of the need for android-based Bi'ah 'Arabiyah material got an average score of 95%, this was stated in the very feasible category and could be used as a basis for making Arabic test manuals. b). The results of the validation of android-based Bi'ah 'Arabiyah material after being assessed by 3 (people) validators with an average score of 83% with a very valid category, this means that android-based Arabic environmental material is suitable to be used based on the criteria set. c). The results of practicality of the android-based Bi'ah 'Arabiyah material guide received an average score of 88%, this was stated in the category of very practical and usable. The researcher concludes that the development of Android-based materials was a positive and effective step in enriching Arabic language learning at Ma'had 'Ali Syekh Sulaiman Araasuli Agam.

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