



Utilization of Smart APPS Creator (SAC) as Alternative Media for Application-Based Learning: Rubik (Rumah Bahasa Indonesia Kita)

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ABSTRACT

The purpose of this study was to determine the meaning of application-based learning media during the pandemic and to be able to provide new innovations to the community in creating the RUBIK application as a learning tool, especially Indonesian language subjects. The method in this study uses a quantitative method in the form of a questionnaire conducted by researchers in order to know the respondents' assessment of the RUBIK application in learning. The results of this study indicate that the RUBIK application has meaning in learning and this application is considered by the respondents to be quite attractive, efficient and effective when applied in the learning process. The only drawback in this research is that the learning is one-way. In addition, this application also has obstacles such as the type of smartphone that does not support installing the RUBIK application. And the full memory on the respondent's cellphone hinders the learning process using this RUBIK application.

Keywords: learning media, smart apps creator, apps, android

Submitted	Accepted	Published
29 December 2021	16 June 2022	30 March 2024

Citation	:	Zahrani, N. (2024). Utilization of Smart APPS Creator (SAC) as Alternative Media for Application-Based Learning: Rubik (Rumah Bahasa Indonesia Kita). <i>Jurnal PAJAR (Pendidikan dan Pengajaran)</i> , 8(2), 149-158. DOI: http://dx.doi.org/10.33578/pjr.v8i2.8702 .
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INTRODUCTION

The development of the times without us realizing it has changed most of human life. The development that we are currently experiencing is the presence of the Covid-19 virus outbreak which has attacked almost all countries in the world, including China, India, Germany, Turkey, the United States, Russia, Brazil and many more countries affected by the Covid-19 virus. took many lives, one of which was in our country, Indonesia, which was also affected by Covid-19, so not only did it take lives, but Covid-19 has changed everything that is affected, starting from the economy, education, workers, employees, teachers, doctors. , and so on, causing everyone to be required to follow developments in information technology in order to keep running in all aspects, so technology can save us from this virus, by using technology, work can still be done even remotely. One of the areas affected by the outbreak is the education sector. The influence of developments in the field of education is changing the learning process to be more focused on technology. Efforts to utilize technology in learning activities are the main thing for educators so that they can still achieve the expected learning goals. Teachers are required to be able to utilize the tools provided by the school as alternative learning. Apart from that, teachers are also required to be able to develop their creativity in creating learning media. That way, teachers must have extensive knowledge about learning media.

Learning media is an educational tool that is useful as a forum for the learning process to achieve effective and efficient teaching goals. With the presence of learning media, educators hope that the learning process will make it easier for students to understand the subject matter. According to Sadiman, learning media can be said to be a means of communication that aims to convey lesson material. The aim of learning media is to improve students' ability to understand the material provided. Interesting learning media can create motivation and a higher level of student interest in learning. This can increase students' level of understanding of the material. At this time, the learning media that educators must create is based on

technology. Basically, we live and have to keep up with the times. Currently, technological developments, especially in the field of education, are progressing very rapidly. We know that all learning is carried out starting from elementary school (SD), junior high school (SMP), senior high school (SMA) and at higher levels, all implementing learning from home, which we usually know as PJJ (Distance Learning). This PJJ is carried out by applying developments in internet technology such as Zoom, Google Meet, Google Classroom, WhatsApp and so on.

Looking at the learning media currently used, there are still many schools that use conventional learning methods, where the learning process is centered only on the teacher and the learning media used is not yet varied, such as still using books and tools that are minimal and less interesting. In this way, researchers aim to develop application-based learning media with the help of Smart Apps Creator. The application created by this researcher is free and unpaid. So, it is not burdensome for students to access the application. This application is named "RUBIK (Our Indonesian Language Home)". This is because the material I present is only Indonesian language material and this application can be used as a learning medium from home or can be used as a distance learning tool. This application was created for junior high school students, especially class VIII because the material contained in the RUBIK application is a presentation of news texts which include the meaning, characteristics, structure of news texts, types of news texts, elements of news texts, linguistic elements of news texts, and how to write news texts. This application is very suitable for teachers who are looking for alternative media for distance learning or learning carried out in the classroom, because this application also has an evaluation in the form of games consisting of 5 questions and will get a score at the end, so teachers can see in detail students' grades directly when these games are played simultaneously in the classroom. That way, this application will make learning in the classroom and at home fun.

The Rubik application is an application created specifically for Android devices. This application can be shared via WhatsApp groups, Facebook, Line and so on. In this application the material presented is intended for class 2 at Junior High School (SMP) level. At junior high school level, students basically still enjoy playing and still have a high competitive spirit. So, this application is appropriate to be applied at junior high school level because the feature contained in this application is that there is an evaluation that determines the number of correct answer scores. In this case, students can compete and increase student learning motivation and have high enthusiasm in the ongoing learning process. Apart from that, the animation displayed in this application is enough to attract students' attention so that students don't get bored easily. This application is easy for students to accept and understand compared to conventional methods which only use tools such as books and educators or teachers who explain by applying the lecture method. The application of innovative learning media should be more developed, especially in the current situation which uses technology as a forum for the learning process. The RUBIK application can be used as a technology product which can be used as an alternative learning media in creative and innovative learning and evaluation processes.

LITERATURE REVIEW

Instructional Media

The word media comes from the Latin word *medius* which means intermediary or introduction. Azhar Arsyad stated that media is an introduction or intermediary for messages from the sender to the recipient with the aim of conveying a message. The purpose of the message here is material or teaching materials that have been planned in a current curriculum. With the existence of learning media, the teaching and learning process can run more easily for students and educators, because learning media can be used as motivation for students to learn. Learning media has many benefits, one of which is learning media which is useful as a student learning resource. This learning media is in the form of objects, humans or experiences. Apart from that, learning media is useful as a teacher's tool, in this case the media plays a role in helping educators achieve planned learning targets. With the media applied in learning, the teaching and learning process will be more interesting, and when the teacher can attract students' attention, students will be younger in understanding the material provided.

The presence of learning media as a forum for the learning process can make it easier for students in the learning process. Apart from being able to increase students' understanding, this learning media also functions to overcome space and time limitations during teaching and learning activities (KBM). According to Sukiman, media is an intermediary that can be used to deliver material, so that it can stimulate thoughts, ideas and build students' will so that an effective learning process can take place. From the explanation above, it can be concluded that learning media is one of the intermediaries in the learning process between educators and students in obtaining effective learning.

Various Learning Media

Media comes from Latin, namely 'middle', 'intermediary' or 'opener'. According to Gerlach & Ely in Arsyad (2017), media as an outline are people, modules, or events that can build students to achieve knowledge, skills, or behavior. Interactive Media is a multimedia tool that can present a message or data from the teacher to students, in the process of which active 2-way communication takes place between the media and the user. There are several types of learning media, including print media, visual media, audio media and audio-visual media. The media is grouped into five groups, including: media without two-dimensional projection; media without three-dimensional projection; audio media; projection media; television; videos; computer. Learning media is anything (whether people, objects, or the surrounding environment) that can be used to convey or channel messages in learning so that it can stimulate students' interest, attention, thoughts and feelings in learning activities to achieve goals.

Print media is anything in the form of an object that functions as a learning resource for students as a means of the learning process. Examples include books, newspapers, brochures, blackboards and so on. Visual media is media that can be seen with the naked eye or sense of sight. For example photos, videos, paintings, slides and so on. Audio media is media that can receive material with the sense of hearing. Examples include radio and telephone. Audio-visual media is media used in the learning process that can be seen with the naked eye and can also be heard. Examples of this media are film and television.

There are various kinds of web and application based learning media. Website learning media is learning media that can be accessed using the internet network, generally it can be accessed directly via a web browser such as Google Chrome, Mozilla Firefox, Internet Explorer, and others. This means that users simply enter the web browser without needing to download additional applications. This media allows learning to be accessed anywhere and at any time, as long as the internet network and learning devices are available. Meanwhile, application learning media is learning media where for every lesson we have to have an application first. There are two types of application-based learning media, first, application-based media which is offline and application-based learning media which is online. In offline application-based learning media, this means that this application does not require a quota when the application is used repeatedly. However, unlike online application-based learning media, this application requires an internet quota for each use.

Android

Android is an operating system for mobile phones based on Linux. Android provides an open platform feature that aims to create applications so that they can be used by a variety of driving devices. The Android operating system is widely used on students' cell phones, this system is also compatible with many applications. Android programming requires the Android SDK (Software Development Kit) and the Java Development Kit. Apart from that, you also need a Java IDE which functions to write Android coding. One of the tools that can be used in Android programming is Eclipse Helios because Eclipse really supports the process of writing Android code and makes the Android development process easier to apply.

Achmad Tharmizi explained that Android is a software used on mobile devices which includes an operating system, middleware and core applications. Android according to Satyaputra and Aritonang (2014: 2) is an operating system used on smartphones and tablets. The operating system can be illustrated as a bridge between the device and its use, so that users can interact with the device and run the applications available on the device.

Android Application Based Learning Media

Android application-based learning media is an innovation that has recently been present in the world of education, in fact not many learning media have been developed using the application model, especially offline ones. This application-based learning media usually contains teaching materials and questions in various forms such as quizzes, essays, or even matching each other. Application products presented as learning media can generally be downloaded on smartphones and tablets with the Android operating system. Android applications are media that are classified as electronic learning media, because the Android application products are run on smartphones and gadgets with the Android operating system. Smartphones and gadgets are a form of communication technology. On this basis, learning media based on Android applications is said to be electronic media.

Basically, we can find the applications presented on Google Play or the Play Store. But apart from that, there are applications that are made by educators themselves and are not listed on Google Play or the Play Store. One example is the production of this research, namely a media application called RUBIK, which was created using SAC (Smart Apps Creator). The application created by this researcher is offline, or can be said to be (free), free of charge. This makes learning more efficient and effective if the RUBIK application media is used in the learning process.

Smart APPS Creator as Learning Media

Smarts Apps Creator is software that provides various features, one of which is creating multimedia applications based on mobile, desktop and websites. In Smarts Apps Creator there is conversion into several base applications such as Android, iOS, desktop and HTML web. In this research, the product created through Smart Apps Creator is based on an Android application. With the creation of this application, we can study whenever and wherever we want without being limited by space and time, meaning learning can be done anywhere and anytime. Considering the current situation which has not completely recovered from the Covid-19 virus outbreak, teachers can develop application-based learning media through the Smart Application Creator.

The following are the advantages and disadvantages of the Smart Application Creator as an application-based learning medium.

1. Advantages

- a) SAC is an Android-based application that can be installed on Android smartphone devices, so it can be said to be a practical and easy application within the reach of space and time.
- b) Has various features, including material explanations, videos and music that we can use. Apart from that, there are practice questions in the form of quizzes with grades or points listed.
- c) Does not charge any fees if you want to use it repeatedly because it is offline. It just requires a quota when installing the application, so this application can be said to be efficient and practical.
- d) The amount of capacity required to download this application does not require a lot of space, only around 18 MB.

2. Disadvantages

- a) The material presented in the RUBIK application is still limited to news text material only.
- b) This application can only be distributed using WhatsApp, Line, Telegram so it requires an internet quota.

METHOD

The method used in this research is a quantitative method. Quantitative methods are research methods based on a particular sample, which are used to analyze numerical data such as percentage diagrams and statistics with the aim of testing predetermined hypotheses. This research aims to create a result, namely interactive learning media that can provide students with learning to easily accept theory, quickly and also efficiently in the learning process.

The research time in this case is around 3 weeks, namely November 6 2021 - November 25 2021 because it requires quite a long editing and design process. The implementation procedure is carried out in stages, that is, first you must be able to choose the materials or materials you want to use in making this media. Second, create a design for the media that we will create, starting from the orientation design, main menu, materials and evaluation to the assessment section. The tools used in making this media are laptops and cellphones. Things that must be prepared are time, energy, ideas, downloading SAC on Playstore or Appstore, preparing or downloading images for background templates, arrow features, checklist features, crosses, and other features needed, downloading sound for effects in the media that will be created, after that also look at the tutorials on the YouTube channel to be used as a reference in creating this RUBIK application.

RESULTS AND DISCUSSION

Research data was taken from the analysis stage, design stage, development stage in making application-based learning media which was carried out using SAC (Smart Apps Creator). Furthermore, it is equipped with filling out a questionnaire for assessing the RUBIK Application media in learning Indonesian.

a) Analysis Phase

This analysis stage aims to determine the development of learning media and the selection of material that will be presented in RUBIK learning media. The aim of developing this learning media is to add new innovations for educators in presenting lesson material and increase educators' creative abilities in assembling this learning media. If the learning media designed by educators produces interesting media, it will have an effect on increasing students' understanding in the learning process using the Android-based Rubik learning media. The following teaching material chosen by researchers in the RUBIK media application creation product is news text material.

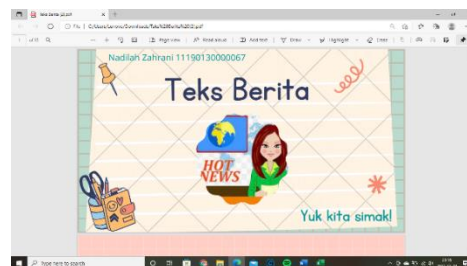


Figure 1. Title Image

b) Design Stage

In this design stage, researchers export their creative abilities and skills in editing learning media, namely the RUBIK application. This stage takes quite a long time because you have to design the flow of learning media starting from the background used, writing effects, music effects, as well as creating questions for evaluation material. In the RUBIK application, researchers designed 5 sections consisting of prefix, home, material, evaluation and assessment. In the initial stage, sound effects and moving images are presented which aim to attract students' attention when opening the application. Second, in the home section, the researcher presents an interesting amber background and there is a writing effect. Third, in the material section, there are moving writing effects and various backgrounds on each slide. Fourth, the evaluation section, where the researcher gives questions in the form of a quiz that students can answer and at the end there will be a score. Well, this score is in the last section, namely in the assessment section which contains the results of the quiz answers, including the sound effect of applause which indicates that you have finished working on the quiz questions. Below is evidence of the features that researchers have created in the RUBIK application.



Figure 2. Application Name



Figure 3. Home section



Figure 4. Example of material

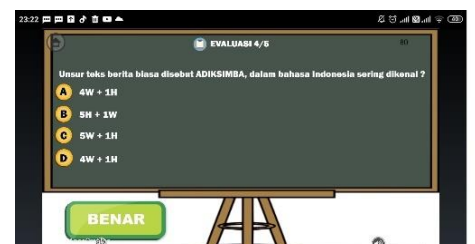


Figure 5. Evaluation/quiz



Figure 6. Final assessment/score

c) Development Stage

This stage is the stage of implementing follow-up production from the design stage. Where the learning media stage is all still edited on a laptop device, then after that it is made into an application for Android devices. So, in Smarts Apps Creator there is a conversion feature so that it can be converted into an application.

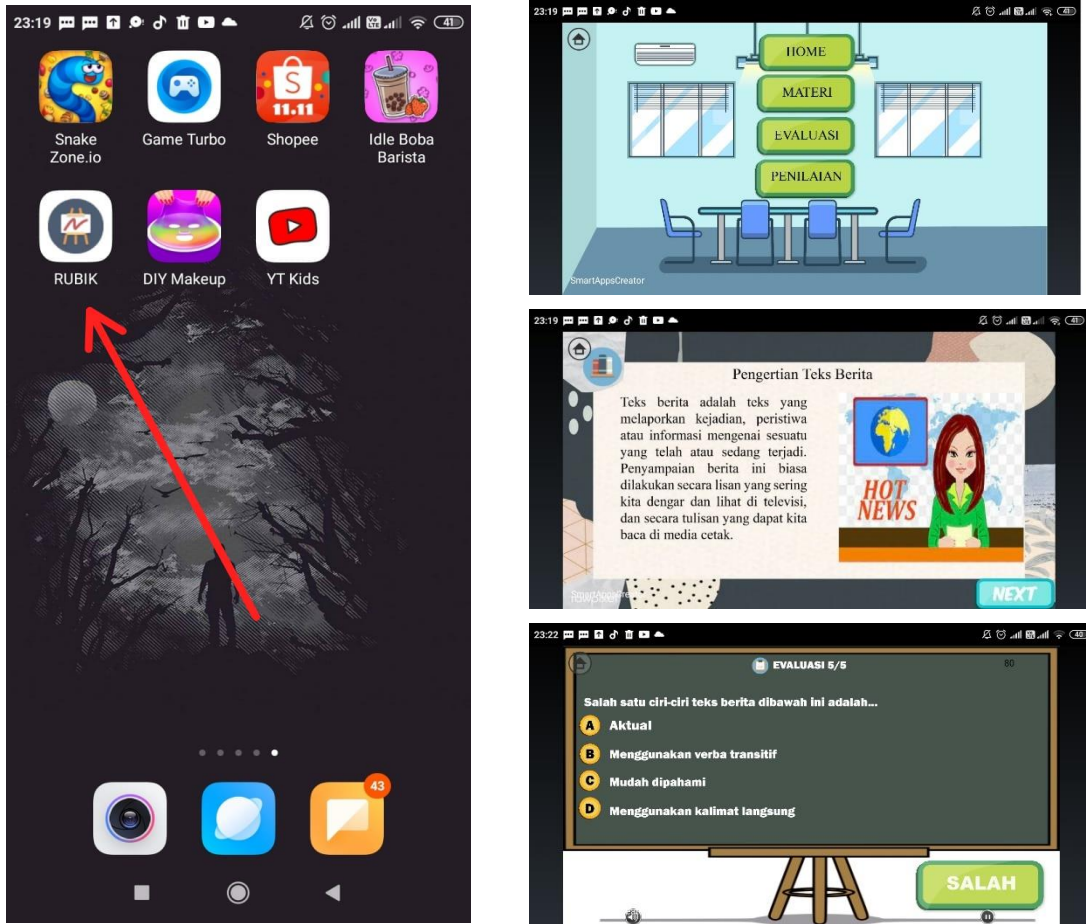
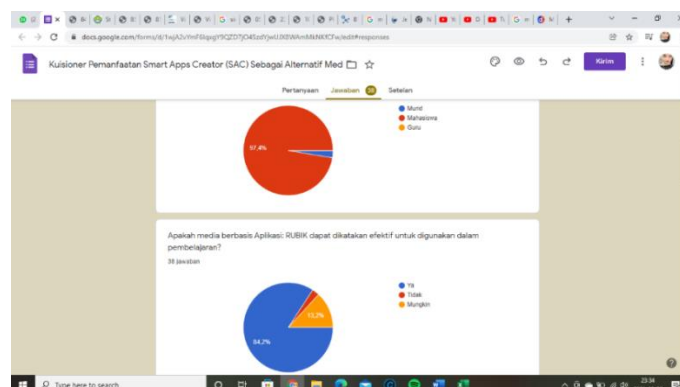


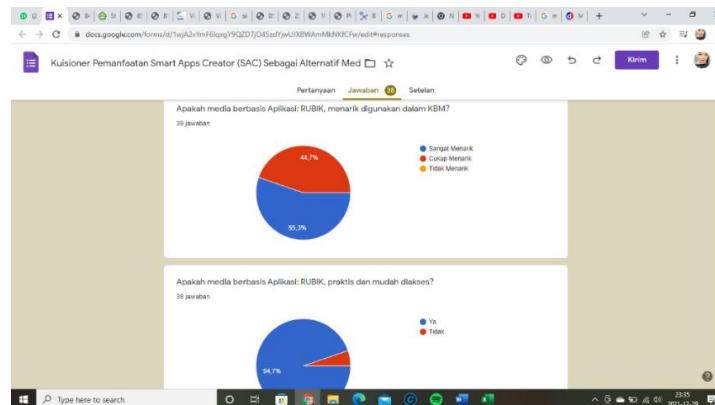
Figure 7. RUBIK Application Media when applied on a smartphone

d) Questionnaire

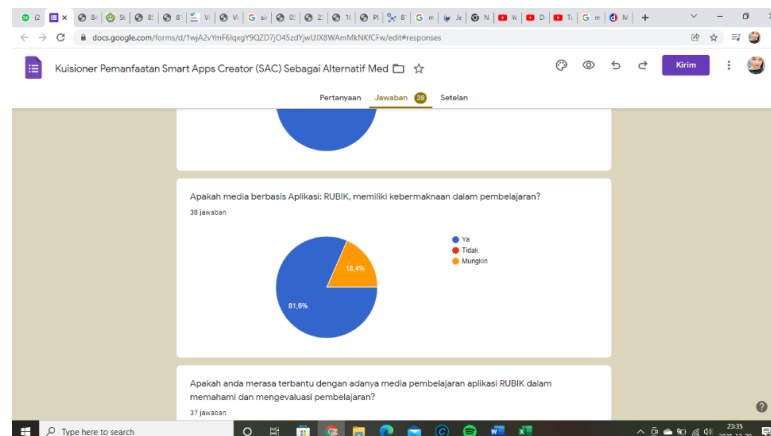
Researchers carried out an analysis by creating a questionnaire to see the assessment of the RUBIK application. Here there were 38 respondents who answered and most of them were students, only 1 person was a student. Next, respondents gave answers to the question whether the RUBIK application media is an effective medium or not when used in learning, and the results of this question were 84.2% answered "yes", 13.2% answered "maybe", and 1 person answered "no". It can be concluded that RUBIK media can be said to be effective. Evidence of presentation on the questionnaire is listed below.



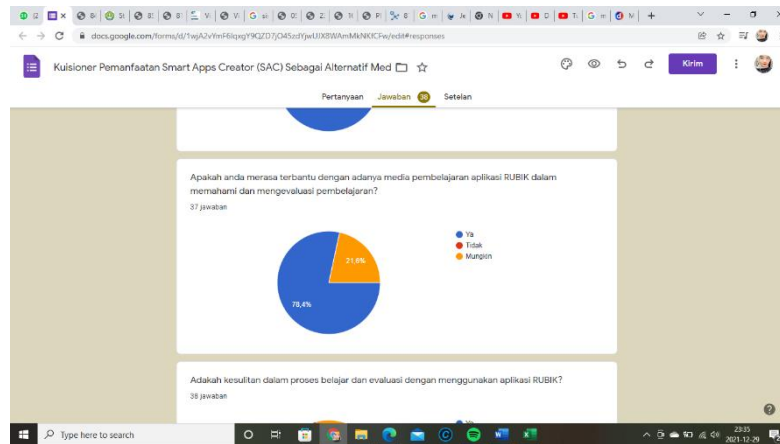
Next, the question shows whether RUBIK media is interesting or not. The percentage results were 55.3% answered "very interesting" and 44.7% answered quite interesting. It can be concluded that the RUBIK application media is interesting to apply as a learning medium. And the graph below shows that the answer to the RUBIK Application media question is practical and easy to access, and 94.7% answered "yes" and 5.3% answered "no". It can be concluded that this media is interesting, practical and easy to access. The percentage proof is depicted below.



In the next question, the researcher asked whether the RUBIK application was meaningful or not in learning. The percentage results showed that 81.6% answered "yes" and 18.4% answered "maybe". It can be concluded that the RUBIK application is meaningful in the learning process. Below is proof of the questionnaire results in the form of percentages.



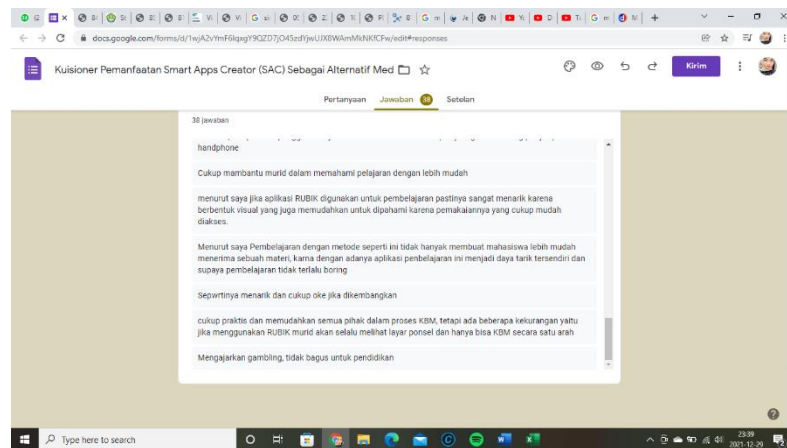
Selanjutnya, peneliti memberikan pertanyaan penggunaan aplikasi RUBIK dapat membantu dalam memahami dan mengevaluasi suatu pembelajaran atau tidak. Responden sebanyak 78,4% menjawab “ya” dan 21,6% menjawab “mungkin”. Artinya aplikasi RUBIK merupakan aplikasi yang dapat membantu proses pembelajaran dalam hal memahami dan mengevaluasi materi pelajaran. Dibawah ini merupakan bukti hasil kuisisioner berupa presentase.



In question number 6, the researcher asked respondents for answers regarding the RUBIK application, according to respondents whether they had difficulties in the learning and evaluation process or not. The overall results of respondents' answers were, 60.5% answered "there were no difficulties". Meanwhile, 10.5% of respondents answered "yes, they experienced difficulties with this application." And 28.9% said "maybe". It can be concluded that the majority of respondents did not experience any difficulties when using the RUBIK application. However, there are also those who experience difficulties in using this application. Below is proof of the percentage of questionnaire results.



In the next question, the researcher asked for reasons from respondents who answered "yes, they experienced difficulties" in questionnaire number 6. The results of the answers from respondents who answered "yes" were respondents who had problems regarding the type of cellphone that did not support installing the RUBIK media application. . Furthermore, there were problems with respondents in terms of full storage space, so they could not download the RUBIK media application on their smartphone. Apart from that, there are respondents who think that the RUBIK application is less efficient because it uses one-way learning which means students cannot be active in asking questions if there are difficulties in understanding the material presented. Below is evidence of respondents' answers regarding the reasons for difficulties in using the RUBIK application.



CONCLUSIONS AND RECOMMENDATION

Based on the results of the analysis and discussion, it can be concluded that the development of application-based learning media uses Smart Apps Creator (SAC) with the name RUBIK after carrying out experiments, namely by distributing the application through the WhatsApp group and ordering several people to try this application, and the results that researchers received were that the application This has quite good appeal according to respondents. The RUBIK application is meaningful and can be effectively used as an alternative learning media for educators. Apart from that, this application can also help students understand the learning and evaluation process. However, there were difficulties experienced by several respondents, namely related to smartphones that did not support installing the RUBIK application and other difficulties such as storage memory being full so they could not install this application media. Apart from that, according to several respondents, this application can be said to be inefficient because it is only one-way learning.

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