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Assistance In Making Learning Media Based on Android-Based Educational Game Learning Media

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Abstract

One of them is the use of smartphones in the field of education in the form of developing learning media in the form of educational games based on mobile devices. As described above, many users from mobile devices are considered very supportive of the application of educational games on mobile devices as learning media. This article describes training in making learning media with Android-based educational games. This community service was held from June 30 to July 14 2023. The location of community service is located in the city of Banjarmasin. The activity results describe an increased understanding of how making educational game learning media integrating local content cannot be done in one meeting. Therefore, in designing activities, a series of meetings is needed so that the knowledge related to making educational games becomes comprehensive.

Keywords: Smartphones, Games, Media, And Learning.

Abstrak

Salah satunya adalah penggunaan smartphone di bidang pendidikan berupa pengembangan media pembelajaran berupa game edukasi berbasis perangkat mobile. Seperti yang sudah dijelaskan di atas, banyak pengguna dari perangkat mobile yang dinilai sangat mendukung penerapan game edukasi di perangkat mobile sebagai media pembelajaran. Artikel ini menjelaskan pelatihan pembuatan media pembelajaran dengan game edukasi berbasis Android. Pengabdian masyarakat ini dilaksanakan mulai 30 Juni hingga 14 Juli 2023. Lokasi pengabdian masyarakat terletak di kota Banjarmasin. Hasil kegiatan menggambarkan peningkatan pemahaman tentang bagaimana membuat media pembelajaran game edukasi yang mengintegrasikan muatan lokal tidak dapat dilakukan dalam satu kali pertemuan. Oleh karena itu, dalam merancang kegiatan, diperlukan serangkaian pertemuan agar pengetahuan terkait pembuatan game edukatif menjadi komprehensif.

Kata kunci: Smartphone, Games, Media, Dan Pembelajaran.

PRELIMINARY

Education with a learning process in it is required to be able to develop students' creative thinking abilities. It relates to the quality of their graduates later, so they gain more than just knowledge. Given the importance of the ability to think creatively, it is hoped that students can

develop these abilities. Learning media is an aspect of learning that can be used to improve students' creative thinking skills. As learning media is a factor that plays an important role in the learning process (Begg, Dewhurst, & Macleod, 2005). The teacher uses the media as an intermediary in conveying material so students can understand it properly. Learning media functions to generate learning motivation, repeat what has been learned, provide learning stimulus, activate student responses, provide immediate feedback and promote appropriate training (Anikina & Yakimenko, 2015).

Hastuti, Waryanto, & Retnowati (2017) suggested that teachers can use edutainment-based learning media to use technology to advance the learning process. Edutainment-based learning media is learning media that contains elements of education and entertainment, so it is very suitable for use in the learning process (Abbas et al. 2022; Mutiani et al. 2021; Mutiani and Faisal 2019; Syahruddin and Arif 2022). Edutainment media is media that has an educational side and an entertainment side. These two things are harmoniously combined with several facilities such as audio, pictures, and animation so that it is intended that learning interest can be increased (Coller & Shernoff, 2009).

Game media is a form of edutainment media. This media has advantages compared to other learning media. In-game media, students can be physically and mentally active and train in visualization and other abilities (Handican, 2018). Media games that have good potential to be developed are Android-based games. This reason is supported by the results of a survey conducted by DI Marketing regarding the use of smartphones in Indonesia in 2016, where the survey results showed that 41% of smartphone users were students (Setyaningrum, 2017).

Educational games are one of the solutions offered as innovative learning media. Educational games can be a medium of learning that is fun, enjoyable, has a sequence and is addictive. According to the research results of Pramuditya, Noto, & Syaefullah (2017), educational games are interesting and fun and can educate their users. According to a survey conducted by Masterweb Corporation (Putra, Nugroho, & Puspitarini, 2016), which discussed the World of Technology and Lifestyle, it was stated that the most frequently cited reasons by respondents regarding choosing smartphones over other ICT devices for use in everyday life were because it is light, fast, easier to use, and taken when travelling (practical). Besides that, one of them is the use of smartphones in the field of education in the form of developing learning media in the form of educational games based on mobile devices. As described above, many users from mobile devices are considered very supportive of the application of educational games on mobile devices as learning media. It is an effective and efficient step

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because it is easily accepted and can be used anywhere and anytime via mobile devices (Panggayudi, 2017).

METHOD

This community service (PKM) was carried out in four stages, namely: 1) initial observation, 2) preparing training materials with partners, 3) carrying out material presentations, and 4) providing android-based educational game training to members of the Win education community. This community service was held from June 30 to July 14 2023. The location of community service is located in the city of Banjarmasin. Those involved in the PKM are the implementing team, the Banjarmasin City We Inspire (Win) educational community, and students in the Social Sciences Education Study Program at Lambung Mangkurat University. In particular, the details of the implementation of community service activities are as follows: 1) Initial observation or field orientation is a step to identify the problems faced; 2) Preparation of training materials with partners, contains activities for discussion of materials to be used in training; 3) Presentation of materials for making educational game-based learning media by integrating local content; and 3) Training on Design and Implementation of Android-based educational games as learning media based on educational games independently.

RESULTS AND DISCUSSION

Anjir Serapat Muara 1 Village farmers are diverse, namely there are land-owning farmers and sharecroppers. Land-owning farmers are farmers who have their own land and work their own fields, but there are also those who need help from farm laborers to help the planting process until harvest. Meanwhile, sharecroppers are farmers who work on other people's paddy fields, by means of a profit-sharing system (Abbas 2022; Putro et al. 2022). For rice farmers in Anjir Serapat Muara Village 1 how to share the results using a count per piece (17 meters), in one piece the landowner farmers will get a share of about two to three cans of rice depending on the agreement between land-owning farmers and sharecroppers.

The use of smartphones (smartphones), Ipads, Tablet PCs, and the like in everyday life is increasingly prevalent (Putra, 2016). The existence of smartphones in society is found from ordinary brands to popular in the community. In addition, the features offered by smartphones also vary. Many game features are not only for entertainment, but there are many games to hone the mind and logic that can introduce material to make it more interesting to accept.

Community service activities include training in making educational games based on Android. According to Suyanto (2003), a game is a structured or semi-structured activity, usually done for fun and sometimes used as a learning tool. Yunus et al. (2015) stated that the

development of games worldwide is increasing rapidly, including in Indonesia. Gameplays have an important function as a means of entertainment or education/training. Games that are popular today are digital-based. Meanwhile, according to Uha (2002), education is a series of efforts to influence other people, starting from individuals, groups, families and communities, so that life behaviour is implemented.

Game integration as a learning medium is intended to optimize the function of conveying information about learning in learning activities. Learning media has benefits. As stated by Sudjana and Rivai (2011: 2), the benefits of learning media are that they can make learning activities more interesting and fun to foster motivation and interest in learning. Development of learning media in the form of games that can be accessed using an Android smartphone. This matter is expected to meet the learning needs of students within the framework of higher and established education to understand that learning can be accessed anywhere and anytime (Wong, Tatnall, & Burgess, 2014).

Given that students and communication tools widely use Android-type communication tools, Android is also used to access information from various sources via the Internet. Besides that, the activity much loved by teenagers today is playing online games which makes almost all of their time spent accessing games (Bradley, 2021; Roth, 2010). Therefore, developing educational games was chosen to help reduce students accessing games without educational value (Coller & Shernoff, 2009).

Learning media in the form of educational game applications that can be easily accessed using Android are easy for students to use anytime and anywhere so that students can continue to learn not only in the school environment (Laurillard, 2005). Media in the form of games can also increase student interest in learning because it provides a different experience—the development of educational games that can provide a more contextual and interesting depiction of learning.

- 1. Preliminary Observations were carried out on Friday-Saturday, 30 June 01 July 2023; in this activity, the service team observed activities carried out by the Win education community. Based on the observations, it was found that the optimization of activities fronted by Win targeted the general public. Win conducts a routine program of activities related to inspirational discussions, recitation workshops, leadership training, and public speaking.
- 2. Joint material preparation

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The activity was held on Friday, July 7 2023, with the Win group community. At this stage, the service team utilizes weekly inspirational discussion activities to adjust the material in preparation for the needs of the service implementation.

3. Material presentation

The activity was carried out on Friday, 13 July 2023; the material was presented relaxedly with interactive dialogue between the service team and the Win education community. The choice of discussion method is intended to increase the intensity of communication. Considering that the service team also involves students participating in activities. The documentation of the stages of this activity is as follows:

Picture 1. Presentation of Service Material





Source: Community Service Documentation, 13 July 2023

4. Android-based educational game design and implementation training

The activity was held on Saturday, 14 July 2023, with the main agenda, namely, providing training on how to use Android-based educational games as learning media. To increase student participation in the implementation of community service, the team decided that students would participate in training activities

The collaboration that is carried out in its service is intended so that the implementation of community-based education can improve the performance of Win itself (Bossér & Lindahl, 2019). In addition, for the Social Sciences Education Study Program, this can stimulate the teams involved to jointly build a network of social relations through various relationships that are side by side and carried out based on voluntary equality, freedom, and civility. The ability of group or community members to always unite in a synergistic relationship pattern (Yami, M'Chirgui, & Barykina, 2021). The tendency to exchange kindness between individuals in a group or between groups themselves. The exchange pattern occurs in a combination of long-term and short-term with shades of altruism without reward (Anikina & Yakimenko, 2015; Martín-Blas & Serrano-Fernández, 2009).

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CONCLUSION

Based on the results of the community service activities that have been carried out, it can be concluded that: 1) The existence of a partnership program can increase participation between the Wins educational community and the Lambung Mangkurat University Social Sciences Education Study Program can increase the knowledge of administrators and community members regarding the creation of educational game learning media based on learning objectives; 2) Upgradeunderstandinghow to make educational game learning media integrating local content cannot be done in one meeting. Therefore, in designing activities, a series of meetings is needed so that the knowledge related to making educational games becomes comprehensive; and 3)Applications for game design and implementation techniques making educational game learning media in a system according to learning standards.

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