



Use of Android Application-Based Learning Media Using PowerPoint and I-Spring Suite

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ABSTRACT

The purpose of writing this article is to describe the analysis of learning media based on Android applications using PowerPoint and I-Spring Suite as an innovation for educators or prospective educators in carrying out learning. Based on the current digital era or information age, the majority of students always spend their time with Android phones. Android phones that have the potential to be learning media are actually used for things that are of lower quality. For this reason, there is a need for learning innovation by developing teaching materials based on Android applications with the help of the PowerPoint I-Spring Suite. Learning media using Android applications will be more interesting and maximize the use of Android among students so as to motivate them and improve their understanding of concepts. The method used in this paper is a literature study that involves reviewing several sources for analysis and conclusions. The results of this study indicate that the analysis of the development of teaching materials based on Android applications using the PowerPoint I-Spring Suite as a learning innovation can be a solution to the problems faced in the teaching and learning process.

Keywords: Learning Media, Android Application, PowerPoint I-Spring Suite.

1. INTRODUCTION

Information and communication technology is currently increasingly advanced and has a significant impact on all aspects of life [1]. The growth of ICT is driving the education community to work on updating how technological tools are used during the learning process [2]. To improve the quality of education, the world of education must always work hand in hand with ICT developments in teaching and learning activities.

The use of learning media is one example of how advances in science and technology in education have a significant impact on the learning process. where teachers are asked to develop new methods that make it easier for students to understand topics while they are studying, in addition to using traditional media such as textbooks and student worksheets (LKS). In order for technology to assist in learning activities and improve student learning outcomes, teachers must develop the ability to use technology. Digital media is used in almost every industry, so the education industry must adapt to the current environment. Given the proliferation of smartphones running the Android operating system

among students today, it's no wonder they rely heavily on technology.

The use of Android in learning today is considered more effective because students can access learning resources, instructions, and applications whenever and wherever they want. Mobile learning is a type of education system that utilizes Android applications. In addition, the idea of mobile learning that uses an Android application benefits from the availability of learning resources that can be accessed whenever needed and has a pleasing visual appearance for students. Making learning media based on Android applications generally requires special skills in understanding programming languages.

Based on research by Nufninu, they only use templates and hyperlink functions in Microsoft PowerPoint to build an operating flow of Android-based learning media, and i-Spring, which is directly integrated with Microsoft PowerPoint, is used to create quizzes and evaluations. In addition, i-Spring will be used to disseminate Microsoft PowerPoint learning materials in HTML5 format. Then an apk format file will be created

from HTML5 with the help of APK Builder software, enabling it to be installed on Android as an application [3].

This article aims to describe the analysis of the use of learning media based on Android applications using PowerPoint and I-Spring Suite as innovations for educators or prospective educators in carrying out learning. The benefit of this research is that educators are expected to be able to utilize PowerPoint and I-Spring Suite applications as materials for making more interactive learning media in order to improve the quality of education in Indonesia.

2. RESEARCH METHODS

The research method used is a literature review and implementing a comprehensive strategy by searching articles on research journal databases and reviewing articles. The database search includes Google Scholar, Sinta, and Scopus. The search for this article uses keywords, namely, Android-based learning media using the Power Point I-spring Suite. From the search results, 12 articles were found that match the desired topic of discussion.

3. RESULTS AND DISCUSSION

Some of the results of the analysis of the articles analyzed relating to Android application-based learning media can be seen in Table 1.

3.1 Android application

Students must be the main actors in finding subject information in 21st-century learning, besides educators. In this situation, the teacher can be seen as a facilitator who directs students to new resources. When compared to other learning media such as electronic learning (e-learning), whose function depends on the internet network, this Android application-based learning media can be accessed offline, so it is very effective and affordable [15].

This Android-based learning media can be downloaded via file sharing on Facebook, WhatsApp, and SHAREit [16]. In addition, application-based media for Android provides benefits in the form of conversations and scoring scores at the conclusion so that teachers can measure how well students use learning resources [17].

Based on the material presented, the use of Android-based learning media can be applied in class. In line with Fatmawati, who stated that learning media based on Android applications were very feasible, effective, and practical to use and could improve student learning outcomes [6], The use of Android application-based learning media can also be done anytime and anywhere, so it can improve student learning outcomes [18].

3.2 Power Point Ispring Suite

SCORM/AICC and flash forms, which are often used in e-learning and LMS (Learning Management System) learning, are created using I-Spring Suite, a tool that converts presentation files into these formats. The software of the I-Spring Suite is offered in free and paid editions [19]. I-Spring Suite is very easy to combine with Power Point so that its application does not require special skills. Some of the features contained in the I-Spring Suite are:

1. To make PowerPoint files more attractive, I-Spring Suite works as a PowerPoint add-in. It is Flash-based and accessible on various devices.
2. Created to support online education I-Spring Suite can add various types of media to make the resulting learning materials more interesting, such as the ability to record and sync presenter videos, add Flash and YouTube videos, import or record audio, add informational presentation creators and business logos, and create original navigation and designs.

Flash content is easily distributed and designed for the web. It can be used anywhere. Create tests with different question types, such as true-false, multiple choice, essay, match, sort, and fill-in-the blank.

The independent learning curriculum requires students to be able to learn independently, and teachers are also expected to be able to apply various interactive learning media. I agree with Nuraini, who stated that teachers are required to be able to operate technology so that learning is more interesting and can improve student learning outcomes [20].

Technology-based learning materials, especially interactive learning materials, are certainly very beneficial for the learning process. The use of electronic media in the educational process, as well as systems and infrastructure in the form of application programs, form interactive learning media, namely media for communicating messages between educators and students. Learning can be done anytime or anywhere with interactive learning materials.

4. CONCLUSION

From the several articles that have been analyzed, it can be concluded that the use of Android application-based learning media using PowerPoint and the I-Spring Suite can make the learning process more fun and the material concepts taught more concrete and easy to understand. It makes it easier for teachers to convey a lot of information in one location so that it is more effective and can increase students' enthusiasm for learning, which can inspire them to succeed in their academics.

Table 1. Results of the Analysis of Development of Android-Based Learning Media Using Power Point I-spring Suite.

No	Author	Title	Results
1.	Uma (2022)	The Effect of Using Android Application-Based Learning Media on Student Learning Outcomes in Class IX on the Concept of Plant Propagation	There is an increase in learning outcomes from the initial condition of 45.30 to 74.50 in the final condition. Besides that, the number of students who completed the pretest also increased from the initial condition of 4 people to 17 people in the final condition. So it can be concluded that the application of Android application-based learning has an influence on student learning outcomes [4].
2.	Hakam (2022)	Development of 'Salam' Android Application-Based Learning Media in Learning Islamic Religious Education in Higher Education	The results of the feasibility test of materials and learning media from experts are very good, and the test of the level of effectiveness of the media is also good, so learning media based on Android applications is very feasible and effective to use [5].
3.	Nufninu (2021)	Development of Android Application-Based Learning Media Using Power Point I-Spring on Lines and Angles for Grade VII Junior High School Students	The results of the study show that learning media based on Android applications are very feasible, effective, and practical to use [3].
4.	Fatmawati (2021)	Development of Android Application-Based Learning Media to Improve Student Social Sciences Learning Outcomes	The results of the study show that the development of learning media based on Android applications is very effective and feasible for binding student learning outcomes; this is evidenced by the increase in pre-test and post-test results, which initially averaged 65 to 75, and 85% of students were budding [6].
5.	Zega (2022)	Development of Android-Based Mathematics Learning Media on Sequences and Series Materials for Class X Vocational High School	Testing the validity of learning media carried out by experts obtained very good results. This was also supported by student learning outcomes, which also increased after using this Android application-based learning medium [7].
6.	Cuhanazriansyah (2022)	Development of monopoly game application media for MIPA subjects (MOMIPA) based on Android technology in vocational high schools	Based on the results of the study, it was stated that the media was valid and effective in use, as seen from the students' classical completeness of 87.5% and the gain score of 0.32 in the moderate category [8].
7.	Dibyantini, R. E., & Harahap, A. F. (2021).	Developing the i-spring media based on project based learning model on the alkane derivatives topic.	The use of i-Spring as a learning medium is feasible and can improve student learning outcomes [9].
8.	Hilwana, D., Wulandari, H., & Saepuloh, L. (2022).	Development of Interactive Android Application Learning Media Based on I-Spring Suite Software at Muhammadiyah 1 Vocational School, Sukabumi City	Based on validation tests by media experts, material experts, and users (students), it was found that the use of i-Spring as a learning medium is very feasible [10].
9.	Ziezie, U., Razak, A., Helendra, H., & Yogica, R. (2022).	Development of Android-Based Learning Media Using Power Point I-spring Suite Free on Animal Diversity Subject Pisces	Android-based learning media using PowerPoint i-Spring is valid and practical to use in the learning process [11].
10.	Hadi, A. P. (2019).	Development of I-Spring Suite 8-Based Learning Media on Refereeing Material for Volleyball Theory and Practice Course 1 Academic Year 2018/2019	Utilization of learning media using i-spring can be used for theoretical and practical learning [12].
11.	Sulistyorini, S., & Listiadi, A. (2022).	Development of Android-based I-spring Suite 10 learning media on adjusting journal material in vocational high schools	Android-based I-spring Suite 10 learning media is very feasible to support the learning process, motivate learning, and increase understanding of learning material for students [13].
12.	Firdha, N., & Zulyusri, Z. (2022).	Use of i-Spring in the Development of Interactive Learning Media	The development of interactive learning media using i-Spring is feasible. In addition, the use of i-Spring in making interactive learning media also increases student motivation, responses, and learning outcomes because it is equipped with pictures, audio, and video [14].

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