



## THE REVIEW OF HIGH-QUALITY EDUCATION IN THE DIGITAL ERA: EMPLOYING APPLICATIONS AS LEARNING MEDIA IN RELEVANT RESEARCH

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**ABSTRACT:** The paper aims to investigate high-quality education in the digital era: the use of applications as learning media in relevant research. Judging from its type, this research is literary in nature, including the type of library research. Library research is research in which data collectionsis carried out by collecting data from various literature. The literature studied is not limited to bookssbut can also include documentation materials, magazines, journalsand newspapers. Advances in communication technology havesinfluenced many people's views on things in everyday life, including views on parenting. Parents used to allow their children to play traditional games with other children outside. However, parents are currently relying more on digital technology as a gaming medium for their children. Education in the digital age is education that must integrate information and communication technology into all subjects. Currently, information and communication technology, including smartphone technology, is developing very rapidly. Smartphones come with different operatingsystems, and one of the most popular operating systems currently is Android. Android is an operating system based on open source. The Androidsoperating system, with its diverse application development, can create representative learning media. With Android-based technology, learning is no longer monotonous with text, but audio or visual elements or even animations can be created to help students understand the material.

**Keywords:** *High-Quality Education, Digital Era, Media*

### PENDAHULUAN

High-quality education is very necessary in an effort to support the creation of intelligent people who are able to compete in the era of globalization. Education has an important role in shaping the character, scientific and mental development of a child, who will later grow into an adult human being who will interact and do many things with his environment, both as an individual creature and a social creature (Pour, 2018);(Feriyanti, 2020). Education is a planned effort to create a learning atmosphere

and learning process so that students actively develop their potential so that they are able to face every change that occurs due to developments in science and technology (Risdiant, 2019);(Aris, 2023).

Students have the mental toughness to drive learning. The driving force comes from all aspects. Students learn because they are motivated by desire, attention, will, or mental power in the form of ideals. Mental toughness can be classified as low or high. The spiritual power that promotes learning is the motivation for learning. Motivation is the mental driving force that drives and controls human behavior (including learning behavior) (Prananda, G., & Hadiyanto, 2019). Motivation contains a desire that activates, moves, channels and directs the individual's learning attitudes and behavior. There are three main components in motivation, namely need, drive, and goal (Abnisa, 2020). Needs occur when an individual feels there is an imbalance between what he has and what he hopes for, drive is the mental strength to carry out activities in order to fulfill expectations, drive is mental power that is oriented towards fulfilling hopes or achieving goals, drive that is oriented towards these goals is the core motivation. Motivation can arise if the teacher is able to present interesting learning such as using creative media.

Learning media is one of the important components in the learning process (Febrita & Ulfah, 2019). The use of learning media should be part of the teacher's attention in learning activities (Pebrianti, 2019). However, the lack of variety and the optimal means of learning used results in a lack of student interest in This is very regrettable, because it contradicts the objective of the media, namely that of useful learning assistance to make the learning process more effective. Learning materials consist of different types, one of the learning materials commonly used in schools is printed learning materials. This media is widely used because it is considered practical, can be adjusted based on students' abilities, and is easy to distribute, but this media has limitations, namely that it cannot display certain objects such as sound, moving images, or three-dimensional objects. Educational media has a big function in various lives, both in the world of education and in social, economic and arts and culture life (Nadlir, 2016).

In educational life, communication media make a major contribution to progress and improvement of the quality of an educational establishment. Using this media, students will digest and understand a lesson, and through a rational systematic scientific approach, educational objectives can be achieved efficiently and effectively. Based on the problems above, the aim of this research is to look at quality education in the digital era: the use of applications as learning media in relevant research.

## **METODE PENELITIAN**

The paper is library research. It is research in which data collection is carried out by collecting data from various literature (Sari, 2020). The literature studied is not limited to books can also include documentation material, magazines, journals and

newspapers. The purpose of library research is to find theories, laws, propositions, principles, opinions, ideas, etc. which can be used to analyze and solve the problems studied.

At the same time, Zed Mestika believes that library research is a set of activities related to library data collection methods, that is, only reading, recording and processing library collection materials without conducting field research. 57 According to Abdul Rahman Sholeh, library research is the study of obtaining information data by placing existing facilities such as books, magazines, documents and historical story records in libraries.

#### **Data collection technique**

In terms of the data used by the author (both primary data and secondary data) is data in the form of written works such as books, articles, etc., in collecting various data the author searches from various sources, reads, examines, relates and records the materials. or materials needed to obtain information related to the discussion.

## **HASIL DAN PEMBAHASAN**

### **Digital Era**

The digital era is where technological developments are increasingly rapid in accordance with the times. Technological tools are not rare tools to find. Almost all activities related to education, social, cultural, sports, economics and politics always utilize sophisticated technology to search for information and help carry out each activity in solving a problem.

In the digital age, there are numerous impacts on society, both positive and negative. The positive impact is that it facilitates the search for information, and knowledge, but the negative impact is linked to and the label of children, namely that a child tends to imitate Western culture and that even children are capable of following it and of (Boiliu et al., 2022). A child can behave this way because the child is able to see pictures, listen to music, watch videos, play games, both online and offline. Children's behavior is basically high in curiosity and always imitates what they see and watch, so it is necessary for parental supervision to make technological tools a child's education, so that children are not selective when using technological tools.

Advances in communication technology have influenced many people's views on things in everyday life, including views on parenting (Alia, 2019). In the past, parents still allowed their children to play outside the house with traditional games with other children. However, currently parents rely more on digital technology as a game medium for children. Many parents are then competing to give their children access to digital technology and put digital technology directly in their children's hands.

Human interaction with humans has been replaced by via digital technology and often without realizing it can reduce a person's direct interaction with those closest to them surround, for example between parents and children at home, each busy with their

gadgets. Even though gadgets are not at all a child's primary need (Lutfi, N., Yanti, S., & Rofik, 2023). People recognize digital devices as evidence of the sophistication of current technological developments (Murthada, dkk., 2023). Based on various kinds of technological innovations currently available, it cannot be denied that gadgets are able to attract many groups. As parents, we are expected to be able to follow current developments in global information regarding the world and current trends in children. Therefore, parents should and should always supervise and care for their children properly and correctly.

### **High-Quality Education in the Digital Era**

Education in the digital era is education that must integrate Information and Communication Technology into all subjects (Ngongo, 2019). With the development of education in the digital age, students can acquire a wide range of knowledge quickly and easily. To meet the educational challenges of the digital age, teachers and students of the 21st century must be able to communicate and adapt to the times, where technology develops in direct proportion to the problems that require solutions. Higher level thinking. Issues faced include globalization, economic growth, international competition, environment, cultural and political issues. These complex issues make it important to develop the skills and knowledge to succeed in the 21st century.

In the current digital era, better known as the era of industrial revolution 4.0, a country can compete with other countries if it has superior quality human resources. Human resources (HR) have the main key in carrying out the world of education. Developing human resources can be done by several factors. One of them is education. The education that humans have can realize all their potential both as individual creatures and as social creatures. Education is very important for a person's survival. Putu, (2020) states that essentially education is a conscious effort carried out by humans continuously (throughout life) in their lives in order to be able to maintain their identity, existence and survival. Education can also be called a process of humanizing humans, where through education a person can maintain their own quality and improve their existence in the surrounding environment. So education is eternal and absolutely must be possessed by all humans.

This aims to direct education to be able to prepare graduates who are independent and reliable both in terms of students and educators themselves. For this reason, every effort is made to advance education in this country. Each teacher is required to have the quality and professionalism to carry out their duties of educating the nation's sons and daughters. So it is necessary to prepare workers, not only those who are skilled in academics but also those who are virtuous and love their country, who will later become prospective workers who are professional in carrying out state duties and are responsible and obedient to applicable regulations. To achieve this goal, the most

important thing needed for the progress of a country's human resources is the learning process.

Students need to have the ability to think to be able to answer the problems they face and education must be able to facilitate developing this thinking ability. This thinking ability can help students solve the problems they will face in the future. Based on a survey conducted on the rankings and achievement scores of the Program for International Student Assessment (PISA), it shows that there has been an increase in the abilities of students in Indonesia in recent years. Indonesia's PISA ranking and achievement scores for 2015 rose from 71st in 2012 to 64th in 2015. This assessment was measured by 72 member countries of the Organization for Economic Cooperation and Development (OECD). Where the highest jump was in the field of science, namely from 327 points to 359 points. This increase in achievement is very encouraging, and should receive more appreciation, but on the other hand the results obtained cannot yet show that the learning carried out was completely good. The results obtained still require further improvements so that the ranking can continue to increase. One way is to improve learning that is oriented towards students' HOT abilities, because based on classroom observations, it shows that most teachers only focus on taxonomic levels C1-C3. The development of students' HOT (High Order Thinking) thinking skills, especially analytical skills, has not yet appeared much in learning. If HOT learning continues to be taught to students, it is not impossible that every year Indonesia will get continuously improving results.

### **The Use of Media in the Learning Process**

The use of media in the learning process is an effort to create more meaningful and quality learning. Learning media functions as a tool to convey learning messages (Nurrita, 2018). According to Fakhriyana et al., (2021) Learning media must be packaged as attractively as possible so that students are interested in learning the material. During PPL, the learning process only uses conventional media such as whiteboards, textbooks and power points. This kind of learning is less interactive, as a result, students do not understand the material well and this affects their learning outcomes.

The condition of students who are not very ready to receive lessons in class often means they do not understand the material that the teacher has conveyed in class. Media that only appears once and materials that only appear once per week sometimes hinder the learning process. Therefore, we need a technology-based learning support, adapted to students' needs, easily accessible capable of supporting the learning process both internally and externally. outside of classroom teaching and learning activities.

Currently, information and communication technologies are being developed very rapidly, including (Wiriany et al., 2022). Smartphones have various operating systems and one of the most popular currently is Android (Ismanto, 2017). Android is an open source based operating system, the Android operating system with various kinds of

application development is able to produce representative learning media (Amirullah, 2021). With Android-based technology, learning will not be monotonous with only text, but will be able to create audio or visual and even animations to allow students to understand the material more easily. Much research has been conducted on development as a learning medium. Here are some results from about Android based learning materials. Android applications can make learning more interesting and also motivate students so they are able to understand the material well (Setyaningrum & Waryanto, 2017). Android-based mobile learning is an innovation in the teaching system because it can be used effectively (Ardiansyah, 2020). Mobile learning as a new way of learning can create a good learning environment (Pangalo, 2020). It is a flexible learning medium in the learning process, 95% of users enjoy this application because it can be used anywhere (Ariani, 2023). It can help the teaching and learning process, 50% of respondents rated this application as very good (Satiabudi et al., 2013). Mobile learning is ready to be used in the learning process because it provides effectiveness in teaching and learning (Ayub, 2022). It is a combination of technology and education used in the teaching and learning process (Cayeni, 2019). Mobile learning is an important part of learning and can be used anywhere and anytime (Faqih, 2020).

Learning to use a smartphone is a unique way because it can be done anywhere and at any time (Harahap, 2015). Smartphone technology has the potential to provide new learning and experiences because students are often directly involved in learning activities (Aripin, 2019). Android tablets are able to improve students' understanding of the material, and have no negative influence on the teaching and learning process in the classroom (Heryani et al., 2022). Android-based electronic learning as part of the learning process can motivate students to learn (Saputra, V. H., & Pasha, 2021).

## **KESIMPULAN**

It can be deemed that the use of media in the learning process is an effort to create more meaningful and quality learning. Learning media functions as a tool to convey learning messages. The packaging of learning media must be as attractive as possible so that students become interested in the learning material. Currently, information and communication technology, including smartphone technology, is developing very rapidly. Smartphones come with different operating systems, and one of the most popular operating systems currently is Android. Android is an operating system based on open source. The Android operating system, with its diverse application development, can create representative learning media. With Android-based technology, learning is no longer monotonous with text, but audio or visual elements or even animations can be created to help students understand the material.

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