

# The Role of Interactive Multimedia in the Field of Education for the Sustainability of Democracy

Nikmalia Maulina<sup>1\*</sup>, Triana Rezekiningsih<sup>2</sup>, Rini Triastuti<sup>3</sup>

<sup>1,2,3</sup> Universitas Sebelas Maret, Indonesia

\*) Corresponding author: [nikmaliao6@gmail.com](mailto:nikmaliao6@gmail.com)

## Abstract

*Science and technology are developing more and more rapidly. This clearly has an influence in various fields in the field of education. The community is required to further improve their abilities and competencies in the world of education, so that they can balance themselves in this modern era. the use of Interactive multimedia as one of the alternatives that can help teachers and students deliver material in the teaching and learning process. The purpose of this research is to find out the use of interactive multimedia in learning in the field of education towards the sustainability of democracy. This research is carried out using descriptive qualitative research methods. Data is collected through participatory observations, in-depth interviews. The results show that the development of learning with interactive multimedia has been carried out well. This is because by using interactive multimedia, students get learning with good information storage, learning design that is shown for students with different learning characteristics, directly aimed at certain effective learning domains, presents realistic learning, can increase student motivation, demands students to be more interactive, learning activities are more individual, have the consistency of the material provided and students have control over the learning speed of each individual. In addition, the use of interactive multimedia is not only one way, but two-way so that it will cause an indirect democratic attitude between teachers and students or students from one and the other.*

*Keywords: learning; interactive multimedia; democracy.*

## Introduction

Science and technology are developing more and more rapidly. This clearly has an influence in various fields of education (Auliah et al, 2023). Education in Indonesia is a development process of a society and government that is carried out consciously and responsibly for the survival and life of the next generation of the nation. Education is also an integral part of people's lives in the global era that must provide and facilitate the growth and development of intellectual, social, and personal skills. The learning process occurs because of a person's interaction with their environment. The connection is that learning requires interaction, this is intended that the learning process is a communication process, meaning that there is a process of delivering a message from someone (message source) to someone or a group of people (message receiver). The learning process is influenced

by the environment, including students, teachers, modules, magazines, interactive learning media and various other learning resources (Ririn, 2020).

In the era of revolution 4.0 which is an era where progress from technological developments dominates. This era is an era that produces modernity characterized by increasing economic growth. Society is required to further improve its abilities and competence in the world of education, so that it can balance itself in this modern era. Education in Indonesia has undergone changes in order to improve to meet the development needs of a nation. The Law of the Republic of Indonesia Number 20 of 2003 article 3 which reads: "national education functions to develop the ability and form the character and civilization of a dignified nation in order to educate the nation's life, aims to develop the potential of students to become human beings who believe and fear God Almighty, have

noble character, are healthy, knowledgeable, capable, creative, independent and become democratic and responsible citizens". Based on that opinion, education has a tremendous influence on human life (Maulida, 2022).

In the current digital era, the use of technology in the world of education is growing quite rapidly, one of which is the use of Interactive multimedia as an alternative that can help teachers and students deliver material in the teaching and learning process. Interactive Multimedia is a multimedia display designed by a designer so that the display fulfills the function of informing messages and has Interactivity to its users (users). The use of multimedia is very much for learning media, games, films, medical, military, business, sports, advertising/promotion, and others. If users get the freedom to control the multimedia, then this is called Interactive multimedia. Interactive Multimedia can present material in a more concrete way accompanied by text, images and accompanied by customized audio, so that it is expected to make it easier for students to learn alternative energy materials (Suryanti et.al, 2021).

Education as an instrument that is used to build and revitalize the quality of human resources (Human Resources) in order to obtain optimal social competence and individual development and be able to provide strong relationships between individuals, society, and the surrounding environment where a person lives. More than that, education is a process of "humanizing humans" which has a contextual meaning that a person must be able to understand himself, others, nature, and his cultural environment (Rosyad, 2020).

The National Education Standards Agency (BSNP) as contained in the National Education Paradigm in the 21st Century, states, a democratic education paradigm, with nuances of play, full of openness, challenges, training a sense of responsibility, will stimulate students to come to school or campus because they are happy, not forced. Teachers are required to be able to create integrated creative and innovative learning. In the framework of 21st century competence, it is explained that knowledge through core subjects alone is not enough, it must be equipped with creative, critical, strong character (responsible, social, tolerant,

productive, adaptive), besides that it is supported by the ability to utilize information and communication with indicators that are information literacy, media literacy, and ICT literacy. In order to increase national development, teachers act as the front line in order to produce quality human resources (Hadijah, 2018).

Citizenship Education which broadly forms a democratic social society requires and also participation both in society and its role as a citizen, this requires a process where civic education is sought not only to be limited to the memorization of articles but also their implementation, and schools as a learning process the application of a democratic atmosphere, and also participatory can be developed both in the school environment and in the classroom. The method of interactive discussion is one of the ways of the learning process that occurs between educators or teachers, with students or students equally, and not making students as objects by teachers, but the perspective of seeing a problem, or discussion in It is the material that can be used as an object by teachers and students, the interaction between teachers and students in looking at the reality that must be updated is a form of humanization (Ermawati, 2022).

Multimedia is taken from the word multi and media. Multi means many and media means intermediary. Multimedia can be seen as a use of many media used in a process of interaction delivering messages from message sources to message recipients, for example in the context of learning to deliver messages from teachers to students. Interactive multimedia this tutorial model is very effective in learning because of its flexible nature, meaning that this learning media can be used in the classroom and can also be relearned by students outside the classroom (Noverdika, 2021).

However, in addition to the optimal use of interactive multimedia, what needs to be considered are several other factors that support the success of the learning process. For example, the selection of efficient and effective learning media, the content and objectives of learning must be in accordance with the characteristics of the media used because learning is an approach that can develop knowledge and skills possessed by students can also foster the social soul of

students between friends and the environment around them (Ilmiani et al, 2020). In addition, learning media has various benefits, including helping teachers in delivering their teaching materials, media is also seen as a communication tool that bridges abstract ideas with the real world. The use of media also makes the process of interaction, communication and material delivery between teachers and students so that it can take place appropriately and effectively (Kurniawati, 2018).

In order to create citizens who are intelligent, responsible, and can actively participate in the life of the nation and state, it is necessary to strive for a strategy and learning model that is relevant to the level and development of students, in this case students. The development of democratic principles in schools that rest on interaction and cooperation, based on mutual respect and concern for each other, creative thinking, finding solutions to problems faced together, and working together to plan and implement solutions. Implicitly this means that democratic schools must encourage and provide opportunities for all students to actively participate in decision making, plan activities and implement the plan (Juanda and Rahayu, 2019).

## **Literature Review**

In this study, the researchers reviewed several literatures that became benchmarks in this study, including the Effect of Animated Interactive Media on Learning Interest in Cultural Arts and Crafts (Sbdp) Regional Song Material for Class Iv Sdn 1 Sawah Lama Bandar Lampung (Utami, 2022), Interactive Multimedia to Overcome the Problems of Arabic Language Learning (Ilmiani et al, 2020), Analysis of Student and Teacher Responses to the Use of Interactive Multimedia in the Mathematics Learning Process (Hadijah, 2018), Paradical Education and Islamic Education in Facing Globalization Challenges in Indonesia (Rosyad, 2020), Implementation of Democratic Education in Schools (Sobri and Umar, 2022) and Citizenship Education Means as Learning Democracy in Schools: An Alternative to Democracy (Rahayu and Juanda, 2019).

## **Method**

The method used in this study uses qualitative descriptive methods. According to Yuliani (2018), qualitative descriptive (QD) is a term used in qualitative research for a descriptive study. This type of research is generally used in social phenomenology. Therefore, with the study raised as the theme of this research, it is expected to provide new study material and be able to answer any questions related to events occurring in the field comprehensively. This qualitative approach seeks to explore in detail and depth in each study studied. Briefly it can be explained that qualitative descriptive (QD) is a research method that moves on a simple qualitative approach with an inductive flow. This inductive flow means qualitative descriptive research (QD) begins with an explanatory process or event which can finally be drawn a generalization which is a conclusion from that process or event (Waruwu, 2023).

## **Result and Discussion**

The world of education and learning continues to grow rapidly along with the development of culture in humans from various theoretical and practical. This has an impact on innovation about the world of education and learning. The basis of the development of education and learning cannot be separated from the development of technology. If technology is associated with the word education becomes educational technology, while if it is connected with learning becomes learning technology. With the influence in terms of technological development, this causes various pattern changes in education and learning. One example of a change in patterns in education in the influence of technology is that every year the education system, especially in Indonesia, continues to experience changes from the curriculum, the implementation of learning to the implementation of exams. While examples in learning changes that are influenced by technology are starting from learning that is only done traditionally to online (Ariani and Festiyed, 2019).

Science and technology are a part that cannot be separated from human life from the

beginning of civilization to the end of all human life. Science and Technology continue to develop along with the development of human civilization in the world. Education is a very important thing in the formation of the character of students, every development of the educational era will always experience changes and of course that change must be better than before. To prepare and produce competent graduates, it is very necessary to develop innovative and interactive learning designs and models. In the implementation of the learning process in Indonesia, the standard has been regulated, namely in the learning process in the education unit, it is held interactively, inspiring, fun, challenging, motivating students to participate actively, as well as providing sufficient space for initiative, creativity, and independence in accordance with the talents, interests, and physical and psychological development of students (Permen RI No. 19 of 2005 article 19 paragraph 1).

This requires educators to be able to adjust learning activities in the classroom by using learning models that are in accordance with government demands, using student worksheets provided by schools, and occasionally accompanied by using learning media that attract students' learning interest in order to help students have a critical mindset in facing 21st Century learning challenges. Learning media is one of the supporters of the learning process. Media is used as a tool for educators to create environmental conditions in learning more effectively and efficiently, so that it can arouse desire and motivation and increase learning interest in order to spur students to apply and integrate various concepts that have been learned.

Interactive Multimedia is a media that is equipped with a controller that can be operated by the user to choose what he wants for the next process. Interactive multimedia is a collection of several media such as text, images, audio, video, and interactive animations that are used to convey information.

Multimedia is divided into several types or categories, namely: multimedia in the form of network-online (internet) and offline/stand alone (traditional) multimedia. Types of multimedia services consist of two, namely stand-alone (offline/stand alone), such as

conventional/traditional teaching and connected to telecommunications networks (network-online) such as the internet. Stand alone multimedia system is a multimedia computer system that has a minimum of storage (harddisk, CD-ROM/DVD-ROM/CD-RW/DVD-RW) input devices (keyboard, mouse, scanner and mic) and output devices (speaker, monitor, LCD Projector).

The advantages possessed by interactive learning multimedia as a learning medium include: (1) providing learning with good information storage; (2) learning design that is shown for students with different learning characteristics; (3) directly intended for certain effective learning domains; (4) presenting realistic learning; (5) can increase the motivation of students; (6) demanding students to be more interactive; (7) learning activities are more individual; (8) have the consistency of the material provided; and (9) students have control over the learning speed of each individual.

The development of multimedia promises great potential to change the way a person learns, how to obtain information, how to adjust the information obtained and so on. Multimedia also provides opportunities for teachers to choose the desired learning process, whether it is a teacher-centric, student-centric or a combination of the two.

The advantages and advantages of using interactive multimedia in learning include the following: (1) a more innovative and interactive learning system; (2) teachers will always be required to be creative and innovative in looking for learning breakthroughs; (3) able to combine text, images, audio, music, image animation or video in one that supports each other to achieve learning goals; (4) increase learning motivation during the learning process until the desired learning goals are obtained; (5) able to visualize material that has been difficult to explain just with conventional explanations or props; (6) train learners to be more independent in obtaining knowledge. The use of this interactive multimedia can increase the motivation of students to learn and develop the abilities possessed by students. Then this interactive multimedia user can also be used by teachers in doing various assessment in the learning process.

Democratic education is a theory of learning and school management that provides opportunities for students and teachers as well as administrative staff to participate freely and equally in school activities. In a democratic school, decision-making involves people affected by the decision (Sobri and Umar, 2022).

Based on the meaning of democratic education, several aspects of democratic education can be identified, among others, the curriculum is designed in such a way that it can provide space for certain schools/regions to adjust to local conditions and needs without having to lose national and global orientation. The curriculum outlines the existence of subjects that lead to a democratic atmosphere in the teaching and learning process and in turn can instill democratic values in students. Furthermore, schools are given freedom in using material materials, there is no requirement for schools or educational institutions to use certain learning materials. Ideally given the freedom to choose their own learning materials (books and media) that they value well. Self-study materials are packaged by recognizing that each student is different from each other with their advantages and disadvantages allowing active interaction and placing educational goals as subjects not educational objects. John J. Patrick, one of the civic education experts from the United States said, to develop and maintain school democracy, it is necessary to educate young people to understand and practice democratic principles (Kurniati et al, 2021).

## **Conclusion**

Interactive multimedia development in learning has been well utilized in the learning process. This is because by using interactive multimedia, students get learning with good information storage, learning design that is shown for students with different learning characteristics, directly aimed at certain effective learning domains, presents realistic learning, can increase student motivation, demands students to be more interactive, learning activities are more individual, have the consistency of the material provided and students have control over the learning speed of each individual. Interactive multimedia this tutorial model is very effective in learning

because of its flexible nature, meaning that this learning media can be used in the classroom and can also be relearned by students outside the classroom. In addition, the use of intellectual multimedia is not only one-way, but two-way so that it will lead to an indirect democratic attitude either between teachers and students or students.

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