

## Use of Artificial Intelligence as an Interactive Media for Students at Tigabinanga State High School

Nursamsiah<sup>1\*</sup>, Diah Sartika<sup>2</sup>, Hasrian Rudi Setiawan<sup>3</sup>

Universitas Muhammadiyah Sumatera Utara<sup>\*1, 2, 3</sup>

<sup>\*1</sup>email: [syamsiahginting@gmail.com](mailto:syamsiahginting@gmail.com)

<sup>2</sup>email: [sartikadiah75@gmail.com](mailto:sartikadiah75@gmail.com)

<sup>3</sup>email: [hasrianrudi@umsu.ac.id](mailto:hasrianrudi@umsu.ac.id)

<b>Abstract:</b> Teachers must be able to design lessons that stimulate students' thinking by using innovative media in the current era of globalization, chief among them media based on artificial intelligence (AI) technology. This will be seen in the high school learning process, making AI-based media technology an aid in promoting students' creativity and intellectual growth. The use of innovative technology-based media in elementary school education is a diversion from the use of conventional text-based media. The application of AI in education will bring new perspectives and positive changes in teaching and learning as it will make teaching and learning easier for teachers and students in high schools. In this era of globalization, artificial intelligence (AI) media based on theory and information technology (IPTEK) is needed to increase student activity and academic performance in high school.	<b>Keywords:</b> Artificial Intelligency; Interaktif; Media.
<b>Abstrak:</b> Guru harus dapat merancang pelajaran yang merangsang pemikiran siswa dengan menggunakan media inovatif di era globalisasi saat ini, yang utama di antara mereka adalah media berdasarkan teknologi kecerdasan buatan (AI). Ini akan terlihat dalam proses pembelajaran sekolah menengah atas, membuat teknologi media berbasis AI sebagai bantuan dalam mempromosikan kreativitas dan pertumbuhan intelektual siswa. Penggunaan media berbasis teknologi yang inovatif dalam pendidikan SD adalah pengalihan dari penggunaan media konvensional berbasis teks. Aplikasi AI dalam pendidikan akan membawa perspektif baru dan perubahan positif dalam mengajar dan belajar karena akan membuat pengajaran dan belajar lebih mudah bagi guru dan siswa di sekolah menengah atas. Dalam era globalisasi ini, media kecerdasan buatan (AI) berdasarkan teori dan teknologi informasi (IPTEK) diperlukan untuk meningkatkan aktivitas siswa dan kinerja akademik di sekolah menengah atas.	<b>Kata Kunci:</b> Artificial Intelligency; Interaktif; Media.

### A. Introduction

Education in Indonesia has begun to highlight very serious problems. This is demonstrated by the fact that each educational institution uses various media depending on the needs of students. The use of these media prepares teachers

to deal with modern technology. Both teachers and students must embrace technology by using existing technological media. The rapid progress of information technology now allows students to connect with teachers through online learning platforms such as WhatsApp groups, Google Doc, Google Form, Google Class, Zoom, and many other forms of these applications.

Media can quickly help teachers express their concerns during the learning process so that learning objectives are met. As learning progresses and educational goals are achieved, media becomes an area that cannot be adequately addressed, especially for primary education students. "Learning media includes physical tools to convey the content of teaching material created by the teacher," said Gagne & Briggs (1975) in Arsyad. (2017). At Tigabinanga State High School, teachers are expected to share knowledge with students through various learning tools. Through educational media, teachers will find it easier to provide information, knowledge and lesson materials that are in line with the RPP and approved curriculum (Ahmadi, 2017).

The problem that arises in the field of education in this period of globalization, especially in secondary education related to teaching media, is teachers' distrust of teaching media based on information technology. (ICT). It cannot be denied that there are still many educators who have not fully embraced information technology. The first obstacle for teachers in mastering ICT is the lack of ICT training and opportunities for self-development for teachers, such as Bastudin (2020). Teachers do not have enough time to dedicate themselves to teaching outside the classroom, or to explaining the various aspects of the World Wide Web (www) or other online learning platforms that are more easily available than traditional classroom methods. Lestari (2015) stated that while some teachers have understood that the teaching strategies described above significantly increase or decrease the level of student performance, not all teachers have used ICT in implementing assigned classroom activities.

The main barriers for teachers to use technology in senior secondary education at Tigabinanga State High School are often lack of access, lack of technology-based learning materials, no integration of technology into the curriculum, no knowledge about technology among teachers, and lack of support from teachers to utilize technology. effectively Nuryati (2016). Explains that many educators do not fully use information technology-based media in their teaching. There are several obsolete hardware peripherals such as infocus, LCD, and speakers, but some teachers still use traditional, technology-based teaching methods. According to Tantri's (2020) findings, teacher creativity in developing online learning media has not reached the maximum level.

Therefore, teachers and students must learn how to use learning resources based on cutting-edge technologies, the most prominent of which is artificial intelligence AI. Regarding artificial intelligence, it is one of the most known forms of media that educators often use in their lessons because it is easier to use and more practical than other forms of media, such as augmented reality and Virtual Reality (VR). It is also easier and more fun for students to use smartphones or other media devices, which can be used in class or at home. There are several features and applications in AI media that are often used in education by students, such as Quizizz, voice assistants, smart content, and many more. However, the use of AI in secondary education at Tigabinanga State High School itself has never been carried out. Due to secondary education, there is more practical material compared to theoretical material. According to the reality of secondary education, students will learn more effectively in class if they can use artificial intelligence (AI) media or not.

## **B. Method**

Using a qualitative approach is a sound descriptive approach to the process. Data collection related to this phenomenon occurs in the social environment. Data sources come from three sources: Person (school leaders, class teachers, and representative students), Place (Tigabinanga State High

School), and Paper. (learning materials and important student assignments that are assigned by teachers).

The model used for data analysis is the Milles and Huberman model (2014). The steps in the Milles and Huberman data analysis model are data collection, data reduction, data display, and data prediction/verification.

### **C. Results and Discussion**

In this study, we will talk about several things related to senior citizen education and how he uses technology, which are as follows:

#### **Technology as a Teaching Media in Education**

Any technology-based learning solution must be able to facilitate student-teacher interaction while maintaining a bold system so that the arts education process runs as expected by the general public. So that students' skills, knowledge and motivation can be improved, teachers must be able to provide more creative learning and use information technology (Sulistyorini, et al. 2020). According to Salsabila (2020), education during the Covid-19 pandemic has largely focused on technology-based learning, which is an important aspect. Thus, it can be concluded that technology can be used as an information medium in education.

The use of bold systems in education during the pandemic has had a negative impact on education in that period. This is because technology has been used to improve communication between teachers and students. Apart from that, technology is also used to enable teachers as a media channel for communication to convey lesson material in a clear and concise way. Any technology-based education must, of course, be able to provide students with timely and accurate solutions when they need calm instruction so that student-teacher interactions do not result in misunderstandings and can facilitate teachers and students in the learning process. It can be concluded that technology is used as a communication medium in education.

Technology is the best alternative when it comes to communication media that is truly effective in providing teachers and students with up-to-date information. Apart from functioning as an information and communication medium in general education, technology also functions as an interactive, expressive and creative medium in secondary education. As interactive media, it is used to present content in the form of YouTube videos, while expressive media is used to update itself in social media content such as tik tok, capcut, lower third animation, and other content. Apart from that, it functions as a creative medium for students, such as creating drawings using various applications such as Canva, Corel Draw, and others.

In secondary education, technology is used as an information medium; students can search for materials using applications or futures on the internet to access course materials and can collect information using technological tools. However, by using technology as a communication tool, students can engage in interactive, real-time activities with social media and use it to teach social media-related content. Using technology as an interactive medium, students can use the YouTube application and share their experiences on social media. On the other hand, as an expressive medium, students can depict themselves in various personal activities that have personal meaning such as flowers as well as general meaning in senior level activities. Once technology emerges as a creative medium, students can use social media applications creatively to write or perform original work.

#### Using Technology in Tigabinanga State High School Education

The use of technology-based learning materials in education does not conflict with globalization theory. Additionally, both in basic education at Tigabinanga State High School (both in high and low grades) and in higher education, one can utilize technology-based learning materials that are widely used in education today to ease the teaching-training process and increase student engagement and performance . The use of technology as a teaching tool can be presented through various social media platforms, so students can

develop their ideas in their senior year and meet other people. As for the statement made by Mulawarman and Nurfitri (2017), education using media can be compared to social media. Social media is a tool that users can use to communicate and engage in social interactions.

One of the first steps towards improving a teacher's pedagogical skills is to use media effectively in technology-based learning, especially in the area of student behavior modification. First, when teaching senior students, teachers must be able to use and adapt to the type of senior students being taught. Senior education at Tigabinanga State High School includes marriage practices that have characteristics and rules that differ from each other when examined closely. Therefore, teachers need to use the latest technology-based media that is in harmony with the learning styles of each student in the class.

Using the latest technology, educational media can be used to teach students using augmented reality (AR), virtual reality (VR), and artificial intelligence (AI) through various applications. Artificial intelligence (AI) applications include Quizizz, Voice Assistant, Smart Content, Pokemon Go, and more. In the form of AR (Augmented Reality) media, there are several applications such as Plotagon, Herbarium, Assembly Edu, and others. On the other hand, in VR (Virtual Reality) media, the application takes the form of a smartphone application that can be used as a VR box, Oculus Rift, or Cardboard.

During implementation in secondary education, students can use AI to discover theoretical content by playing games such as Quizz and Pokemon Go, or they can search for information and lessons about using gadgets / cellphones. (Voice Assistant, Smart content). You can also use AR to provide homework (homework) that is written in text and can be illustrated with animated graphics. While material prepared by teachers can be used with AR media using Assemblr Edu, which consists of students registered to create interactive senior essays, it can also be used with AI media, which consists of students registered to complete Senior essays through educational games or

games such as Pokémon Go. Less sabotage is still possible if students use virtual reality (VR) media, such as watching videos, listening to music, watching old movies, and seeing real-world examples from people's daily lives, sometimes even from neighboring countries. (VR box). Thus, it can be concluded that in secondary education, the appropriate medium would be AR, or more precisely represented by VR in practical material, and AI, more precisely represented by theoretical material, although AR can also be used in it.

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#### Artificial Intelligence in Tigabinanga State High School Education

According to Cengara in Cahyadi (2019), media is a tool or means used to convey important information from communicators to the general public. Media can be considered as an effective communication tool between information sources and information consumers. Through these media, people can engage in several activities, the most important of which is education. Using AI-powered media in education is a safe, interactive form of media that can enhance the creativity of students and teachers.

AI technology has a significant impact in improving quality and making learning more practical and effective. Apart from that, it can provide many benefits and ease of use for the educational process, making it more effective in various fields, especially secondary education at Tigabinanga State High School. This has shown that AI-powered media creation can significantly improve the quality and effectiveness of learning.



Technology-based media is used in education often with the use of artificial intelligence, or theoretical content. Here are some AI learning resources used in classroom instruction. According to Madjid (2021), these resources come in seven varieties: Virtual Mentor, Voice Assistant, Smart Content, Presentation Translator, Global Courses, Automatic Assessment, and Personalized Learning are the seven types. However, there are five varieties that can be used to teach secondary education at Tigabinanga State High School, namely Virtual Mentor, Voucher Assistant, Smart Content, Presentation Translator, Automatic Assessment

#### **D. Conclusion**

From the analysis above, it can be shown that technology is being used as an information, communication, interactive, expressive and creative medium in secondary education. Using technology in secondary education at Tigabinanga State High School to teach theoretical content involves using artificial intelligence (AI) media with educational games to discover material and topical knowledge and using augmented reality (AR) to provide written content and animated images. However, with practical materials with AI-powered games (or educational games), students can play collaborative learning games; with AR-driven media, students can create interactive senior citizen stories; and with VR-powered media, students can see the stories of senior citizens with open eyes. There are five applications available for using AI media in secondary education in elementary school: Virtual Mentor, Voice Assistant, Smart Content, Presentation Translator, and Automatic Assessment.

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