ANALYSIS OF THE USE OF SMART CONTENT TECHNOLOGY IN HISTORY LEARNING

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Abstract

The use of modern technology in the 4.0 era is no stranger to us, the use of this technology has advantages and disadvantages depending on the interpretation of each individual. In the context of history education, this smart technology can support effective learning media if used optimally. The purpose of this study is to discuss the challenges of how to use good smart content technology in history learning, see the advantages and disadvantages of smart content technology when used in history lessons, to interesting strategies that can be produced by Artificial Intelligence / AI. The method and approach of this research uses Library Research, this method involves data collection, evaluation, systematic synthesis of literature and information from various sources available in the library or from the internet (online) related to the research context. To ensure the truth of the sources used, accuracy in checking, viewing, rereading the sources used in compiling hypotheses. The results of the analysis show that the use of smart content technology in history learning is very good to use and can build new creations in more modern learning. The use of artificial intelligence also supports the existence of references that can be accessed by students in searching for historical sources on the internet. The task of a teacher in this case is to supervise, guide, and ensure that the use of this sophisticated technology is used as well as possible so that it does not cause errors in students in searching for information, and a teacher must ensure that the sources used are relevant and accurate so as not to cause erroneous interpretations.

Keywords : history, technology, modern, artificial intelligence

INTRODUCTION

The history of the industrial revolution starts from industry 1.0, 2.0, 3.0, to industry 4.0. The industrial phase is the real change of the changes that occur. Industry 1.0 is characterised by the development of mechanised production to support the effectiveness and efficiency of all human activities, industry 2.0 is characterised by mass production and quality standardisation, industry 3.0 is characterised by mass customisation and manufacturing flexibility based on automation and robots. Industry 4.0 then came to replace industry 3.0 which was characterised by cyber physical and collaborative manufacturing. The term industry 4.0 originated from a project initiated by the German government to promote the computerisation of manufacturing (Gani & Saddam, 2020).

The industrial revolution is certainly very much affecting human life in various aspects including education, technological advances in this millennial era not only see quality but also quantity. The balance of these two things is very important in achieving the progress of a civilisation.

The development of digital technology has had a significant impact on various fields, including education. One innovation that is gaining increasing attention is Smart Content, which is the use of smart technology to generate and manage adaptive and interactive learning materials. In the context of history learning, this technology offers great potential to enrich students' learning experience, bring historical events to life through simulation, and provide content tailored to individual needs and interests.

However, despite its great potential, the use of smart content technology has a variety of difficult challenges. Several studies have suggested that pedagogical, technical and cultural barriers hinder the full integration of the curriculum. In addition, there has been no detailed research on the impact of using smart content technology on learning history, both from the perspective of improving

understanding of historical concepts and student learning motivation (Najmi, 2022).

Smart content technology is designed to meet consumer needs by always updating accurate data, prioritising consumer satisfaction and maximising content. The following are aspects that include smart content: 1) Targeted, which is always providing what customers need and need. 2) Optimised, which is to make content more visible and easy to find. 3) Always on, which is a machine that is always optimised adaptively, dynamically, and relevantly. 4) Integrated, which is content that is always activated across all digital channels. 5) Profitable (profitable), namely because the content is fun, interesting, and changing (Zainuddin et al., 2016).

Overall, smart content is a strategic approach that combines the best practices of content marketing, search marketing, and AI to create high-performance, customer-centric content that drives engagement and conversion including in education.

This growing use of digital technology will create new problems but also facilitate human work. This AI (Artificial Intelligence`s) technology greatly facilitates human work, especially in the field of education, with the intelligence of this search robot all data on the internet can be accessed easily.

History learning in schools that is currently developing is known as a textbook and lecture system that is very monotonous, boring, and others. Often encountered in various schools in Indonesia, this seems to make history subjects uninteresting in the eyes of students. Not a few studies, theses and theses discuss the problems in learning this history, this can occur due to several factors such as inefficient learning methods from teachers who use the lecture method, decorated with questions and answers, there is also a textbook which is too focused on textbooks. Of course this makes history lessons uninteresting for students so that the image of learning history is underestimated (Agustien et al., 2018).

Indonesia has changed the learning curriculum at least 11 times, starting from the old order, new order, to reform, and in 2021 the latest curriculum was launched, namely Merdeka Belajar. In this latest curriculum, history lessons are also in the spotlight, which is stated in the Decree of Education Regulation No. 032 / H / KR / 2024 concerning Basic Learning Outcomes, Primary Education Level, and Secondary Education Level in the Merdeka Curriculum. History lessons are expected to foster historical awareness to students, students can also develop self-understanding and collective understanding as an Indonesian nation.

Teachers as educators are required to be able to at least master sophisticated technology such as this smart content. Teacher competence in the use of digital content must be able to maximise existing media, in addition to facilitating learning but also making the classroom atmosphere and interaction with students is expected to increase.

The use of smart content technology also requires teachers to combine learning with learning media such as sophisticated search engines that can be accessed by devices such as mobile phones, computers and others. Therefore, the things that will be discussed in this paper are related to: 1) Maximum use of smart content technology in learning history. 2) Supporting and inhibiting factors for the use of smart content technology. 3) The impact of using smart content on students' learning experience and outcomes. 4) The application of smart content to the history learning curriculum.

METHOD

In this research, the method used to examine the problem and research data is the Library Research method or what we are familiar with library research is a technique that involves data collection, evaluation, systematic synthesis of literature and information in various sources available in libraries or from the internet (online) related to the research context. This research uses sources on the internet ranging from articles, journals, and other documents that support the research context in this paper. (Sulasman, 2014, pp. 73-147)

RESULTS AND DISCUSSION
The Role of Technology in History Learning

In general, learning history is to foster the spirit of nationalism in students, introduce Indonesian history and culture in the past. Learners are expected to master skills in historical knowledge both in their environment, and in the wider world. Learners are also expected to have an attitude, and

knowledge about Indonesia centric.

The introduction of online schools began to be recognised in early 2020, at which time there were restrictions in all sectors including education. Covid-19 is an infectious disease caused by the SARS-CoV-2 virus that occurred in late 2019 and spread rapidly in Indonesia in 2020. Online learning innovations began to be introduced for students, allowing students to learn only from home with a hand phone and data package can be accessed various kinds of material.

Since then, many Artificial Intelligence / AI technologies have been designed and have begun to develop, with the ease of technology that is easy to access also making accelerated progress (Subandowo, 2022).

History learning in schools that we know today is a long process in the past, lecture-based learning and textbooks we know in the past make learning less interesting. In contrast to contemporary learning in the 4.0 era, in the progress of education in Indonesia, history lessons with interesting creations are also starting to be recognised.

Technological advances also have a good impact on learning history, teachers and students can be facilitated in various learning needs. The effectiveness of the use of this technology depends on teachers who should better understand its use, but not all educators understand and have competence in the field of modern technology. The utilisation of this technology certainly opens up new opportunities for teachers to support learning in the classroom, with smart content students are facilitated to find information and material that is weighted on the internet (Subandowo, 2022).

Supporting And Inhibiting Factors for The Use Of Smart Content Technology In History Learning

The use of smart content in learning has weaknesses and advantages that are supported by several factors, the following are supporting factors in the use of smart content technology in learning history:

1) Advances in digital technology

The advancement of digital technology is the main factor that encourages the use of smart content in history learning, this is in line with the progress of the times that are increasingly increasing, learning materials designed with artificial intelligence have an effective impact on the history learning process. The learning experience also becomes more effective, interactive, and tailored to the needs of students in history learning.

Smart content is also easily accessible with just a computer, tablet, or mobile phone, with a stable internet connection users can easily access all the needs in learning history (Setiawan, 2019).

2) Enrichment of learning materials

Smart content technology can make learning more interactive with animations, videos, simulations, and games that attract students in the learning process. Various types of learning around the world can be easily accessed by users, history teachers can also immediately make the atmosphere in the classroom more active by changing learning methods, making syllabus / RPP combined between curriculum and smart technology such as smart content.

Enrichment of learning materials also refers to efforts to improve quality and broad insight by utilising advanced technology. Students can also explore learning history through this smart content by creating historical light projects, can be with animation, explanatory videos about local and international history, and many things that can be collaborated with the school learning curriculum.

3) Digital literacy development

These 21st century skills allow students to develop digital literacy, critical thinking skills, and other skills needed in today's society. Digital literacy also refers to the ability of students to use digital technology, communication tools, and networks effectively and efficiently in society. Digital literacy is an important aspect in the 21st century, because almost all fields use digital technology. The things that must be done in digital literacy are technological skills, the ability to find information, digital security, digital ethics, and digital collaboration.

4) Learning Environment that Supports Collaboration

The next supporting factor is the learning environment that supports collaboration, combining learning with digital technology. In this case, smart content acts as a learning media to be a source of information for students,

because the features available in smart content facilitate collaboration between students. However, the classroom environment must also be open and flexible to collaborative learning so that the learning process can be effectively carried out and have a good impact.

These supporting factors are caused by several things including support for personalisation of learning, digital advancement, increased access to global education, and evolution of pedagogy. While the inhibiting factors on the use of smart content in learning are:

a) Limited Access to Technology

The main inhibiting factor of the use of smart content in this learning is the limited access, both in terms of infrastructure in various parts of Indonesia, where fast internet networks are currently not fully accessible, so that students and teachers cannot fully access smart content to the fullest. And this factor is also caused by the social gap between students, due to the unstable economy of students' parents to support digital-based learning, so that smart content learning is not fully recognised.

b) Limited Technology Skills

The lack of competence in the use of digital technology based on the lack of digital literacy makes it difficult for most teachers to carry out smart content-based learning. The use of digital technology should indeed have qualified skills, so that learning runs effectively and efficiently.

c) Resistance to Change

Many teachers and institutions in Indonesia are hard to leave the traditional teaching that is considered to be efficient, some of them are still stuck on learning with the lecture method and textbooks, for example in learning history. This is considered inefficient to use now because of the factors above, learning methods should be more modern by adopting technology as a new learning medium. This culture must be changed immediately by modern educational institutions to compete at the international level. Ready or not, teachers must immediately change traditional learning methods to modern learning. Smart content in this case has not been fully used because if this factor is still inherent.

The Impact Of Using Smart Content Technology In Learning History

In an increasingly advanced digital era, smart content is an effective solution that can be used in the field of education. The use of modern technology made by AI and search engines certainly has positive and negative impacts. First, smart content can improve the quality of learning, learning content can be visualised according to creativity from 2D or 3D forms. With this feature, learning will be easier to understand, for example the use of 3D in history learning to visualise Borobudur temple. Students will understand more quickly because of the extraordinary experience.

This technology is also very flexible that can be used anytime and anywhere to make activities easier. We cannot avoid the impact that technology will produce, most people are now turning to modern technology, one of which is this smart content in the learning process.

The positive impact that this will have is in the form of convenience in each of its features and is beneficial to the learning process, this artificial intelligence will also save resources such as the use of writing paper. The presentation of material that is so instant and straightforward also makes it easy for students to understand the essence of learning. Although some of the positive impacts caused by smart content can make work easier, there are also negative impacts resulting from the use of this technology in history learning.

The main negative impact that will be caused by the use of this technology is dependence on technology, students will continue to depend on this technology because it feels instant. The negative impact that will result from this dependence is the reduction of critical thinking towards a problem, weakness in understanding the material delivered by the teacher because they assume that the teacher is not smarter than AI. The next impact that will be caused by digital technology is the lack of basic skills, basic skills in students in learning history as follows, lack of ability to memorise the names of heroes in Indonesia, lack of interest in learning local and world historical events, and many more will be caused.

Implementing Smart Content in the History Learning Curriculum

The application of smart content in history learning can create new experiences and innovations for classroom learning, learning will be more dynamic, interesting, and can be adjusted to student interests. This modern technology will make it easier for teachers to learn, the first step is to identify students' interests and abilities to tailor history content to each student. Then select and develop a learning platform that is fit for effective purpose.

Teachers must always evaluate learning techniques through this smart content so that there is always something new and interesting every lesson. Teachers also need to learn more about this technology to maximise results in the field. The selection of interest-based history content will make history lessons more interesting in the future. Teachers must also be able to adjust to the applicable curriculum so that they are always directed and remain in line with the applicable curriculum.

DISCUSSION

Based on the results of the above research, the use of smart content technology in history learning can be more efficient. The combination of educational curriculum with digital technology is very necessary now, especially in the field of education. Technology development should already exist in the education system in Indonesia, seeing the development of technology in the 21st century which focuses on digital technology. smart content-based history learning can increase student learning motivation with creative and interesting visualisation, but it is unfortunate that educational institutions in Indonesia are still very minimal in using this smart content-based technology.

In addition, teachers as providers of learning materials are also very minimal who are competent in the digital field. Collaborative learning media will have a big impact on student learning in history learning. Animation and visuals in technology will facilitate the presentation of learning materials, some students sometimes do not understand the material presented by the teacher because the explanation is wide or too broad, the description of a historical event cannot be imagined by some students who listen to the teacher's explanation in front of the class. But with the smart content technology, the presentation of material by the teacher will be clearly illustrated and students will understand it more easily.

Although there are advantages and disadvantages in using this smart content, the teacher's ability must be qualified to reduce the negative impact on the use of digital technology. besides being able to maximise learning, the use of technology can also make work or daily life easier. Support from the government is needed in the implementation of digital technology, especially in education in Indonesia towards the next golden indonesia 2045.

Learning history with smart content technology is a new innovation, combining educational curriculum with technology will be very complete. Creating animations in the form of educational videos is the best solution for learning, besides being easy for students to understand, this combination will also increase students' competence in using technology. Animation can be made in the form of visual games that contain historical events or historical backgrounds, this will be perfect if handled by the right people specifically for history teachers in Indonesia.

CONCLUSION AND SUGGESTIONS

The approach to learning history with digital technology systems is indeed perfect for modern learning. Students do not have to focus on textbooks or textbooks, but with this new innovation, learning will be maximised and efficient. Although shortcomings exist in this system, teacher competence will be needed in the use of digital technology. teachers as the mediator in learning which becomes a forum for developing students' abilities. The existing advantages must be maximised for the running of this developing modern system to be able to face the challenges of future civilisation.

Educational institutions must continue to develop the capabilities of educators so that the position of teachers cannot be replaced by digital technology that is increasingly widespread. literacy about technology must be improved especially when we see that this will greatly impact both good and bad for students and teachers.

BIBLIOGRAPHY
Agustien, R., Umamah, N., & Sumarno, S. (2018). Pengembangan Media Pembelajaran Video

Animasi Dua Dimensi Situs Pekauman di Bondowoso Dengan Model Addie Mata Pelajaran Sejarah Kelas X IPS. *Jurnal Edukasi*, *5*(1), 19. https://doi.org/10.19184/jukasi.v5i1.8010

Gani, A. A., & Saddam, S. (2020). Pembelajaran Interaktif Pendidikan Kewarganegaraan Melalui Mobile Learning di Era Industri 4.0. *CIVICUS : Pendidikan-Penelitian-Pengabdian Pendidikan Pancasila Dan Kewarganegaraan*, *8*(1), 36. https://doi.org/10.31764/civicus.v8i1.1849

Najmi, A. (2022). Strategi Teknologi Dalam Pembelajaran Sejarah Pada Abad Ke-21. *OSF Preprints*, 1–7.

Setiawan, D. (2019). Analisis Dan Perancangan Sistem Informasi LENTERA Untuk Membentuk" Smart Society "Di Lingkungan Kampus Menggunakan Metode OOAD (Studi Kasus …. *Prosiding Seminar Nasional Teknologi …*, 155–159. http://prosiding.unipma.ac.id/index.php/SENATIK/article/view/1133

Subandowo, M. (2022). Teknologi Pendidikan di Era Society 5.0. *Jurnal Sagacious*, *9*(1), 24–35. https://rumahjurnal.net/sagacious/article/view/1139

Zainuddin, Z., Areni, I. S., & Wirawan, R. (2016). Aplikasi Augmented Reality pada Sistem Informasi Smart Building. *JNTETI*, *5*(3).