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# Challenges of Technology Integration in Teaching History and its Relationship with Student Motivation

# Ibna Nur Watul Padli, Ruhizan Mohammad Yasin

Faculty of Education, Universiti Kebangsaan Malaysia, Selangor, Malaysia Email: P118262@siswa.ukm.edu.my, ruhizan@ukm.edu.my

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#### **Abstract**

The subject of History aims to cultivate Historical Thinking Skills among students. However, the inclusion of this subject at the primary school level often raises concerns regarding students' proficiency and enthusiasm for delving into the topics outlined in the history curriculum from Year 4 to Year 6. In line with the Ministry of Education Malaysia's aspiration to see the maximal use of educational technology applications to enhance the quality of students' learning in schools, teachers are encouraged to use technology applications in the teaching of History to ensure the subject remains interesting and enhances students' motivation. This concept paper will discuss the challenges of technology integration in teaching history subject and its relationship with student motivation in learning history. There are two aspects underlying the discussion of this concept paper: the challenges faced by teachers in integrating technology while teaching this subject in schools and the effects of technology integration on student motivation. This study can help formulate educational policies, especially in planning technology support programs for the History subject in schools. This includes providing resources and training to enhance technological skills among teachers. The study is conducted using the document analysis method on past research. The results of the study show that teachers still face challenges in terms of teaching preparedness, inadequate facilities, student readiness, and parental support in integrating technology for history learning. The study also found that technology integration in the History subject is effective in enhancing student motivation to learn. A brief survey can also be conducted to understand teachers' views on the development of relevant and effective digital learning programs to enhance their knowledge and skills in the use of educational technology.

Keywords: Historical Thinking Skills, Motivation, Technology Integration, History, Challenges

#### Introduction

## **History Subject in Malaysian Primary School**

The History subject is one of the core subjects in the curriculum, aiming to shape students' understanding of the historical facts of the country while also molding students with a sense of identity and appreciation for the characteristics of citizenship. In the year 2014, the History

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subject was introduced through the Primary School Standard Curriculum (KSSR), covering the early history of the country to the present day. The primary school History curriculum is based on six pillars of KSSR: Communication, Spirituality, Attitude and Values, Humanity, Science and Technology Literacy, and Self-Skills. These six pillars are values that support each other and are integrated through high-level thinking skills.

One of the objectives of introducing the History subject at the primary school level is to instill the attitude of making judgments, understanding the reasons, consequences, and significance of historical events. The focus is also given to ensure that students can comprehensively understand the history of the country's development chronologically. The position of the History subject has strengthened with the establishment of a special historyrelated section, namely the Central Committee on Educational Fields and later the History Division in the Curriculum Development Center, as well as the Federal School Inspectorate Council. History became a compulsory subject starting in 2013, and for primary schools, starting in 2022, the Ministry of Education Malaysia (2022) has made history as a core subject in examinations. In the context of learning History in primary schools in Malaysia, several factors play a crucial role in determining the outcomes or goals of the subject. Among them are textbook content, teaching methods, pedagogy, the use of resources, teacher skills, and student attitudes. At the most basic level, textbook content is considered the foundation for history teaching. The publication of history textbooks in schools is entirely controlled by the Textbook Division, Ministry of Education Malaysia. Control is also exercised over the use of history textbooks in all schools (Mohd Samsudin & Shahizan Shaharuddin 2012). This is to encourage teachers to diversify history teaching methods.

According to Nor Erna and Leong (2014), the quality of teachers is the most significant factor at the school level, crucial for the success of students, along with factors such as interest, attitude, and students' learning styles. Therefore, teachers' considerations in choosing the teaching methods used are crucial to providing an enriching and student-centered experience. This is supported by Magdalia Alfian (2011) in her work "History Education and the Challenges Faced," which stated, "History is an uninteresting, boring, difficult subject," indicating that students do not actually like the subject. According to Brown (1980) as well, mastering the history curriculum is not a difficult matter, but the real weakness lies in the way it is delivered.

The use of technology in the history subject is crucial for providing students in schools with an overview of past events. If teachers solely rely on storytelling techniques or textbooks, students may become bored as they cannot delve deeply into historical events. Conversely, if teachers incorporate technology such as YouTube applications, they can visually showcase historical events through videos available on this platform. Furthermore, YouTube, with its diverse range of videos, brings a realistic element and is suitable for illustrating various historical events. According to Mike Anderson (2016), teachers can enhance students' intrinsic motivation by offering choices in learning. Therefore, the use of technology applications like this in history teaching and learning can stimulate students' motivation and interest in learning the history subject. This is because students find it easier to comprehend and remember the core topics in this subject. Teaching with such applications not only aids in understanding for students but also fosters an enjoyable learning experience through entertaining video content or short stories on YouTube.

Hence, this concept paper aims to identify the challenges faced by teachers in integrating technology into learning and discuss how technology impacts students' motivation to learn history at the elementary school level.

#### **Problem Statement**

The Industrial Revolution has indeed had a significant impact on various fields, including education. The use of digital technology, artificial intelligence, and other advanced technologies has transformed the learning process, prepared the workforce for the future, and aligned the education system with the evolving needs of the job market. Advancements in digital system development have led to improvements across various industries globally. According to Khir Khalid (2019), technological progress has the potential to save energy and time during the delivery of knowledge to students in various fields. However, reports from the Ministry of Education (BSTP, 2017; MOE, 2013, 2018) state that 80% of teachers in Malaysia only integrate e-learning into their teaching for less than one hour per week. Nilavani & Khairul Azhar (2021) found in their study that the digital learning system received a less satisfactory response among students. The integration of technology in learning is still low among History subject teachers. According to Maarof et al. (2020), students still practice the learning pattern of reading and memorizing historical facts. This leads to a lack of understanding of ideas and concepts presented in a history topic.

The learning process through selected learning applications has an impact on student achievement (M. Kaviza, 2019). According to Taufik Ridwan & Aldo Faisal (2021), contemporary education needs to be technology-oriented to create interactive, productive, effective, inspirational, and enjoyable teaching and learning. However, considering that History is still a relatively new subject at the elementary school level, teachers face various challenges in ensuring that the teaching and learning of this subject can be delivered through various strategies and techniques that can enhance the value of History in schools. Based on M. Kaviza (2021), Google Classroom serves as a meaningful facilitator for the History subject, capable of shaping an interesting perspective among Generation Z to learn History due to their exposure to interactive gadget use. However, Kaviza (2021) found that students' perspectives on historical learning skills using the Google Classroom application are still at a moderate level. This indicates that history teachers have not fully optimized the use of this technological application, despite its features of two-way interactive learning and the convenience of sharing interactive materials. Razak et al., (2019) also found that the implementation of e-learning in elementary schools among teachers in Malaysia is still at a low level. Consistent with Siti Hajar et al., study (2019), teaching and learning strategies in the era of the Fourth Industrial Revolution are based on four main elements: creativity, reflectivity, reciprocity, and responsibility. This suggests that the practice of technology integration is crucial to help teachers incorporate all these elements into each student's individuality. Therefore, this concept paper will delve deeper into the challenges faced by teachers in integrating technology into the teaching and learning of the History subject, resulting in suboptimal integration practices. This concept paper will address the following questions.

- 1. What challenges do teachers face in integrating technology into the teaching and learning of History subjects?
- 2. What are the effects of integrating technology into the teaching and learning of History subjects in schools in terms of enhancing student motivation?

## **Literature Review**

## Integration of Technology in Teaching and Learning

According to Booth (1993) and Goodwin and Stevens (1993), quality learners are produced through effective teaching and learning processes. In the History subject, various engaging

approaches can be applied in teaching and learning, such as Outdoor Classroom Learning (OCL), Self-Access Learning (SAL), and the Use of Information and Communication Technology in Learning (ICT). These learning methods are expected to create more meaningful learning situations. Studies on the application of technology in primary school History subjects attempt to highlight four techniques: tutorials, exploration, communication, and applications. Currently, the use of information and communication technology is aimed at facilitating the teaching and learning process (Ministry of Education Malaysia, 2011). In the 21st-century era, the application of technology in teaching sessions is not a new phenomenon, as almost all institutions at various levels use technology to deliver learning sessions. In the context of teaching the History subject, Historical Thinking Skills require students to master in-depth knowledge of historical events (Mohd Mazlan et al., 2016). Therefore, the current technological medium is seen as capable of helping teachers implement high-level Historical Thinking Skills among students because they can get a clearer picture with video and graphic applications about historical events. Sahin & Yilmaz (2020) found that the use of technology in teaching activities has an impact on students' interest during learning. Yildirim and Sensoy (2018) also state that the use of ICT is considered a standard for educators, teachers, and researchers in the education world. This clearly indicates that the integration of technology in education to enhance students' competency will contribute to social development and knowledge dissemination.

The use of technology as a facilitator in teaching and learning suggests that teachers need to have a deep understanding of how lesson content is transformed according to specific technological applications. Norehan (2021) in her study found that the challenges faced by teachers in using technology, especially during online learning are very high. This indicates that teachers in Malaysia are still not ready to implement technology integration in learning while outside the school. Lee Bih Ni (2013) in her study stated that the use of Information and Communication Technology (ICT) has managed to attract the interest of students in Europe towards conducted teaching and learning. Technological facilities are also capable of promoting virtual learning that can be utilized not only by students and teachers but also by parents in carrying out interactive and communicative learning activities (Ministry of Education Malaysia: Malaysia Education Development Plan 2013 – 2025). The current Generation Y also tends to use various social media applications such as Facebook, Twitter, Instagram, TikTok, and others, not only for entertainment but also creatively turning these applications into mediums for sharing knowledge. Basilana & Kvavade (2020) also found that several online platforms have been identified to make digital learning more beneficial, such as Zoom, Google Meet, Telegram, Edupage, and others. Mulenga & Marban (2020) also state that the ease of current technological applications facilitates teachers in conducting online learning.

Therefore, teachers need to be aware of technological advancements because the quality of teachers is the most significant factor at the school in shaping the success of students. Digital concept learning is also a transformative education system capable of positioning Malaysia in global education comprehensively to impact all educational institutions (Mohamed Nazul, 2020). Additionally, according to Abu Ayyash and Hill (2019), effective technology integration will occur when students not only use technology every day but also have access to suitable materials and tools, providing opportunities for students to build understanding of the learning content. Technology integration also has the potential to have a significant impact on the teaching and learning system among teachers and students in the classroom (Thulasimani 2014).

At the primary school level, the subject of History aims to cultivate a deeper understanding of the identity, values, and events that shape the world. By combining elements of theory, readings, and practical activities, students can develop historical sensitivity and appreciate the connections between the past, present, and future. The integration of technology in the teaching of History can bring a new dimension to learning, making it more dynamic, interactive, and relevant. For instance, teachers can employ Virtual Reality (VR) and Augmented Reality (AR) learning techniques by taking students to historical places through VR or AR experiences. Attard and Holmes (2020) also state that the integration of technology in teaching and learning has proven to encourage active engagement in schoolbased learning. Teachers can also create History podcasts or educational videos to explain historical events and figures. The integration of technology in teaching History allows teachers to create more dynamic and relevant learning experiences. To meet the ever-evolving needs of learning, technology in education has become two essential components that need to be combined to achieve set learning objectives (Suvarmani Subban et al., 2022). By leveraging digital devices and applications, teachers can enhance student engagement, facilitate deeper exploration, and build a better understanding of historical events and concepts.

### Technological Pedagogical Content Knowledge (TPACK) Theoretical Framework

In enhancing teachers' competency in utilizing technology from the teaching aspect, this concept paper presents the Technological Pedagogical Content Knowledge (TPACK) framework as a reference foundation for teachers to think, plan, and make decisions on how to integrate technology as a learning tool while teaching in the classroom (Niess, 2011). The TPACK framework, as depicted in Figure 1, developed by Matthew Koehler and Punya Mishra in 2006, has been widely used in research within school contexts.

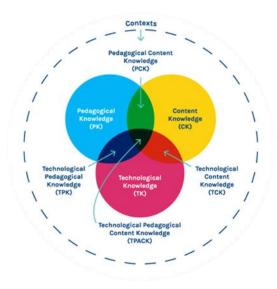


Figure 1: Technological Pedagocigal Content Knowledge (TPACK) Theory

This framework was known as TPCK. Thompson and Mishra (2007) announced the change from TPCK to TPACK following decisions made at the 9th Annual Technology Leadership Summit in 2007. The TPACK theoretical framework consists of three main sources, namely Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK). From these four foundations, four additional knowledge areas emerge, namely Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK),

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Technological Pedagogical Knowledge (TPK), and finally, Technological Pedagogical Content Knowledge (TPACK) (Mishra & Koehler, 2006). The application of this theory can enhance the effectiveness of technology-based teaching in history subjects because teachers can plan instruction more systematically through mastery of each knowledge domain in this theory.

History as a relatively new subject at the primary school level indicates that there are still many applications of technological tools separate from pedagogical or content aspects, leading to less practical learning situations through technology integration. Additionally, changes in curriculum content often require teachers to readjust the use of technological tools when delivering history lessons in the classroom. According to Hasniza Nordin (2014), the use of the TPACK conceptual framework can be improved because the structure of each source in the model can be applied by teachers in various situations, as discussed by Chieng Eng and Tan Choon Keong (2019) regarding the importance of TPACK, such as:

- 1. Facilitating difficult topics for teachers to understand.
- 2. Assisting teachers in improving their proficiency in creating interesting teaching materials and designing useful teaching materials using pedagogical knowledge and TMK.
- 3. Allowing teachers to develop effective strategies in student learning.
- 4. Planning teaching content by integrating the effective use of ICT.
- 5. Enhancing teachers' skills not only in the effective use of technology but also in designing related content and pedagogy effectively.
- 6. Assisting teachers in planning and implementing classroom activities guided by the use of various types of TMK tools (such as Web 2.0 design tools).
- 7. Helping teachers shift their focus from using social networking tools more meaningfully.

## **Challenges Of Integrating Information Technology In History Subject**

When applying information technology in teaching history, teachers must wisely plan teaching plans and related activities because the history curriculum framework at the primary school level is quite extensive. This is also to ensure the effective use of technology in learning and to have a significant impact on students' achievements in this subject. However, there are several aspects that can pose challenges to teachers when applying technology in history education.

## **Teacher Preparation in Planning Learning Sessions**

The use of less engaging teaching techniques and strategies by teachers can create a dull atmosphere, especially when not well-planned. However, the acceptance of technology among teachers varies depending on their perceptions of technology use in the classroom (Jung et al., 2019). Some teachers who lack knowledge to plan technology-based learning may find the use of technology more challenging. This is supported by Mirzajani and Mahmud (2016) in their study, which found that school teachers lack knowledge of the effectiveness of technology in teaching due to a lack of understanding of the importance of educational technology. Ravendran and Daud (2020) also state that teachers are still willing to choose conventional methods such as 'Chalk and Talk' and do not utilize available technology. Conventional methods like one-way lecturing or 'chalk and talk' are no longer relevant in producing well-rounded individuals in terms of physical, emotional, spiritual, and intellectual aspects (Fariza Khalid, Md. Yusoff Daud & Mohd. Jasmy, 2020).

Therefore, when using technology-enhanced learning in teaching history topics, teachers need to master the use of technology by ensuring that the material is exploratory, applicable, and capable of creating communication between teachers and students. The changing role of teachers requires them to be trained and exposed to various new skills so that they can handle information technology effectively. However, the situation reveals that many teachers lack skills in using technology applications for learning in the classroom. Mwila (2018) study also proves that younger teachers have a more positive readiness level and higher interest in ICT compared to older teachers. In this regard, administrators can provide professional development training to enable teachers to use ICT more efficiently and confidently (Aslan et al., 2018). The training received by teachers is a crucial aspect of the computerization process in schools (Soon & Kooi, 2020). Additionally, the selection of technology resources used should be appropriate for the learning content delivered to ensure that learning objectives can be achieved to the maximum extent. In this case, teachers need to consider whether the chosen technology tool can easily convey the learning content to students. Furthermore, teachers face challenges in creating two-way interaction between students and education, especially in online learning. This leads to unsmooth online interactions, resulting in the failure to achieve learning objectives (Deepika Nambiar, 2020).

#### **School Environment and Infrastructure Facilities**

The classroom environment plays a crucial role in ensuring the smooth and optimal use of learning technology applications. However, not all schools in Malaysia are equipped with complete learning technology tools. Many teachers, especially in rural areas are forced to use their own purchased technology tools to facilitate the teaching process. The unequal distribution of computers between rural and urban schools is also very noticeable. Mcculloch (2018) states that issues such as school infrastructure and teacher skills are of great concern. A study by Subban et al. (2022) found that the implementation of e-learning is limited due to incomplete school infrastructure. Although the Ministry has provided computer labs, internet connections, and so on, they cannot meet the needs of teachers to integrate technology into teaching. Razak et al. (2019), who conducted a study in rural schools in Malaysia, found that delayed funding from the government posed a challenge to teachers as they could not use technology infrastructure in schools for e-learning material preparation. Many rural schools have outdated technology equipment that is no longer suitable for use. This makes it difficult for teachers to apply technology tools in classroom learning. Teachers with computer skills do exist, but opportunities to use computers in schools are limited due to insufficient hardware, time constraints, and other arising issues (Hamzah & Attan, 2007; Shanmugam & Balakrishman, 2018; Ravendran & Daud, 2020). For schools in remote areas, issues of internet access are not uncommon. Mahathir Yahaya and Wardatul Hayat Adnan (2021) in their study found that challenges faced by students through online learning are internet access issues that disrupted the learning process for students. This has led to a decrease in student motivation for online learning. Indeed, internet facilities in schools have a significant impact on helping teachers integrate learning technology into the history subject.

## **Student Self-Learning Readiness**

In applying technology in the History subject at the primary school level, teachers face challenges in guiding students on the skills of using various multimedia such as computers, ICT, and videos. This is different for those at the secondary school or higher levels, where the application of technology in learning is easier because today's generation Y students already

have basic skills in using technology for learning. Therefore, students' readiness for selflearning at home is crucial to enhance their motivation to use technology in learning. However, the lack of financial resources among parents prevents them from providing educational facilities for their children, such as school supplies, learning materials, tuition classes, and more (Mahamod et al., 2021). As a result, children do not fully apply the integrated technology learning style at home. For primary school students, they need to be guided until they reach a level of self-learning ability because their ability to use technology applications in learning is still low. Some students may be passive in class because of a lack of confidence in showing their weaknesses in using learning technology tools such as computers for History learning. This is said to be due to a lack of exposure and knowledge dissemination related to the use of digital technology for students and the community (Mohd Norakmar Omar, Siti Noor Ismail, Mohan Rathakrishnan 2021). According to Mohamed Nazul (2020), challenges related to attitude change to adapt to digital learning tools are still widespread in society. Moreover, students may have differences in access to technology and internet connectivity at home. Some students may have sophisticated equipment, while others may need additional support to achieve equal access. This is supported by Mohd Fairuz et al. (2020) in his studyon the readiness for online learning during the Covid-19 pandemic, which found that socioeconomic factors become a barrier to students' readiness for online learning.

The current use of information technology facilitates students in accessing information quickly and extensively. The use of multimedia also provides opportunities for active student engagement in history learning (Ramakrishnan, Renuka, Norizan Esa, and Siti Hawa Abdullah, 2013). Therefore, the skills of using learning technology materials should be emphasized by teachers to enhance confidence in long-term self-learning because it can benefit both students and teachers. At this stage, students will gain confidence in using various multimedia tools such as browsing the internet and using various applications like Frog VLE. However, students also face issues related to smart digital devices to follow technology-based learning, as highlighted by Anuar (2020), who mentioned that learning faces two main obstacles: the ability of parents to purchase gadgets such as mobile phones, laptops, tablets.

## **Perceptions and Parental Support**

Parents play a crucial role in enhancing their children's learning and motivation at home. According to Nordin & Bacotang (2021), guiding children into the world of technology involves the absolute involvement of parents. However, in Malaysia, parents might not understand the concept of digital learning or know the best way to support their children in this learning process. Ayu et al., (2020) study on parental perceptions of online learning found that parents face difficulties in teaching their children at home. This happens because parents do not fully understand the tasks given by teachers, leading them to teach their children in a general manner. This is also supported by Sukmawati (2021) in her study on parental perceptions of online learning using *WhatsApp*. This is because parents, especially those in the B40 group, cannot afford to provide technology-based teaching resources such as tablets or computers capable of supporting learning applications through *Zoom Meeting, Google Classroom*, and others. The results of this study indicate that most parents only use *WhatsApp* as a teaching and learning medium for their children at home. The teaching and learning process using the *WhatsApp* application relies solely on teaching materials sent through audio, voice messages, and visual written information.

Furthermore, the use of the internet can distance or bring closer the relationship between parents and children (Haslina et al., 2020). This indirectly shapes the perception of

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other parents that the use of technology has negative effects on the psychological development of children, leading them to limit the use of technology at home. However, Abdalah (2018) found in several schools in Abu Dhabi, aiming to identify parental perceptions of support, encouragement, and adaptability to online learning, also showed that parents have moderate satisfaction with the teacher's ability to use computers during teaching sessions. Imran Khan (2021) in his study also showed that parents have a positive opinion to support technology-based learning. In conclusion, parents need to prioritize skills and knowledge in using technological resources such as computers in their children's learning. However, B40 parents in Malaysia experience a different situation because they themselves are less skilled and feel that the use of technology brings problems in terms of cost and usage. Therefore, they choose traditional methods to teach their children at home.

## Effect of Technology Integration on Student Motivation Motivation among Students

Motivation according to Sulaiman & Jasmi (2013), is the effort to achieve a desire or need. Individuals are more interested in various things or activities that provide support or encouragement to their desires and preferences. Ryan and Deci (2000) define intrinsic motivation as internal and external drives of the individual. Individuals with high intrinsic motivation tend to fulfill self-satisfaction in performing activities. In the world of education, the desire or motivation and interest of students in acquiring knowledge are key factors in achieving success in learning (Ridha & Fauzi, 2017). In this context, motivation becomes the main key to obtaining satisfaction in learning for each student. In the learning process within the classroom, intrinsically motivated students always want to complete assignments quickly and focus without expecting any rewards. They are also seen to respond actively and joyfully during learning sessions in the classroom. According to Suprihatin (2015), shaping learning motivation for a student is one way to develop the abilities and preferences of students in their learning. In the subject of history, high motivation needs to be instilled in students to achieve the curriculum goals of history, aiming to provide understanding and empathy about the history of society, country, and the world. Ridzuan Masri, Arman Ahmad, and Razlina (2018), explained Maslow's Theory based on Maslow's Motivation Principles and the Motivation Principles of Workers by L. Stum (2001). The hierarchy of human needs, as outlined in Maslow's 'A Theory of Human Motivation, includes five stages, as shown in Figure 2

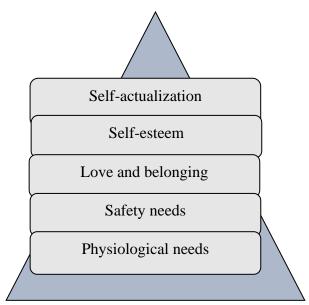


Figure 2: A Theory of Human Motivation

The highest stage in this theory is self-actualization. This stage focuses more on the development of personality and motivation that arises from the needs acquired by each individual. Maslow argues that certain internal needs will manifest the behavior of the individual. Therefore, when teachers successfully meet this need by capturing students' interest through the use of technology applications in teaching history, student motivation will be more easily formed to achieve better results without external control and stimulation. This stage also highlights the true potential and talent of individuals to succeed in given tasks.

## Impact Of Technology Integration On Students' Motivation To Learn History

The integration of technology in teaching the subject of History can provide various benefits, including an increase in students' motivation to learn. Studies by Laksita et al., (2020), Zhai, Li & Chen (2019) have shown that the integration of technology and ICT in teaching and learning activities enhances students' interest in learning. According to Ahmad Fakrudin, Wan Norina, and Nor Khayati (2019), technology applied in the teaching and learning process represents a new shift in the pedagogical delivery techniques of educators. This is because technology integration can provide interactive learning experiences for students through the use of technology applications such as simulations, virtual designs, and educational games in history learning. This can make learning more interesting and enjoyable, increasing their motivation to learn the subject, especially at the elementary school level. Aditya Kamajaya Putra and Agus Frianto (2018) state in their study that intrinsic motivation is an internal drive. When interest exists, students' engagement in the learning process will help them understand and remember the content more quickly. Kiuru et al. (2020) also found in their study that the technology-enhanced learning environment increases students' active interaction, subsequently enhancing their motivation to learn.

Furthermore, students' motivation will also increase when teachers utilize online access to digital resources. This allows students to access various digital sources such as historical documents, videos, and images. The ability to explore and retrieve information easily can enhance students' interest and motivation because they are no longer solely reliant on storytelling to understand historical events. According to Balamuralithara Balakrishnan (2018), students' motivation levels vary depending on their psychological needs. Students of

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the current generation, born in the era of technological modernization, perceive technology as part of their lives. Hence, applications like the use of smartphones or tablets can potentially boost their motivation to learn. Shamsuddin et al. (2019) also found that the use of smartphones greatly facilitates students in accessing their learning materials, making them more enthusiastic about learning.

Moreover, technology integration in the History subject also offers visually engaging learning features that can increase students' interest through the use of visual media such as documentary videos, animations, and interactive maps. According to Mohammad (2020), Quizziz is a self-learning tool that allows students to explore their knowledge and abilities, and this application can attract students' interest in learning. Visualization in technology applications like this not only stimulates students' imagination and interest but also facilitates teachers in the process of delivering educational knowledge. Additionally, technology-based learning in the History subject meets the characteristics of 21st-century learning with collaborative learning application among students, whether inside or outside the classroom. Online learning platforms like Google Meet and Zoom Meeting allow students to interact with classmates, discuss, and collaborate on history projects. The use of Web 2.0 applications in teaching and learning is influenced by the concept of 'open educational resources,' meaning all information and applications on Web 2.0 are free to use without restrictions, and users can interact more systematically with others in the virtual world (Ahmad Fakrudin, Wan Norina & Nor Khayati, 2019). Collaboration can enhance motivation through social learning experiences, as students are not solely dependent on in-class interactions with peers.

Educational games centered around the subject of History can be a fun way to motivate students. Studies by Karakoç et al. (2020), Ismaeel and Al Mulhim (2021), as well as Sahin and Yilmaz (2020), have proven that the use of technology-based games significantly helps improve students' academic achievements. These findings align with research by Deskoni, Yuliana, and Edwin (2019), as well as Serly and Endra (2019), demonstrating increased student motivation when using interactive applications such as online games. Technology allows teachers to provide timely formative assessment feedback and encouragement regardless of time constraints. Students can quickly see their achievements, boosting motivation to improve their performance and understanding. Words of encouragement and prompt feedback can positively impact students, making them more enthusiastic and active in their learning (Nor Asmah Abdullah & Muhammad Syawal Amran, 2021). According to Nur Syarafina et al. (2020), effective digital learning can be achieved when technological facilities are complete, and students have motivation to enhance their knowledge through digital learning.

Through technology, students can access learning resources outside the classroom, such as digital history networks, virtual exhibitions, or virtual visits to historical sites. This provides them with opportunities to engage in a broader historical context, creating a deep and motivating learning experience. Online learning or digital learning materials offer flexibility for students to learn at times and places that suit them, making learning more personalized and enhancing motivation. Ismail and Ahmad (2022) found that Web 2.0 technology applications not only improve students' performance in History but also instill excitement for understanding real-life events or issues. By wisely and creatively incorporating technology, teachers can create a more enjoyable and meaningful History learning experience for students, ultimately boosting their motivation to learn History.

#### Conclusion

In conclusion, this conceptual paper aimed to examine the challenges of integrating technology in teaching the History subject and its impact on student motivation. The transformation of education towards digital learning requires a holistic approach, and in the context of the History subject, technology integration opens new opportunities to enhance learning. The level of student motivation in learning History serves as a warning about the need to collectively face this challenge. Teachers, the ministry, parents, and the community need to collaborate to design engaging learning strategies, especially through the use of technology. This is not only to achieve curriculum goals but also to stimulate students' interest in history learning. Digital learning is not just about technology but also involves creating a positive learning environment. By engaging students in interactive activities such as educational games, visual teaching, and access to digital resources, their motivation can be enhanced. Positive feedback and better understanding through digital learning can encourage students to achieve higher levels of achievement. The roles of parents, teachers, and the community cannot be overlooked in implementing this transformation. Collaboration among all parties is crucial to ensuring the success of technology integration in history learning. Furthermore, continuous improvements in teaching and learning methods need to be prioritized to strengthen students' intrinsic interest in the History subject. Ultimately, the integration of technology in history learning is expected to create a fun learning experience, focusing on the development of 21st-century skills and fostering a lifelong learning spirit. Through collective efforts, we can ensure the success of a balanced digital education aligned with socio-economic development.

#### References

- Anuar Ahmad & Nelson Jinggan. (2015). The Influence of Teacher Skills in Teaching on Academic Achievement in History Subjects. JuKu: Journal of Curriculum & Teaching in the Asia Pacific. 3(2): 1-11.
- Anuar Ahmad, Siti Haisah Abd Rahman & Nur Atiqah T. Abdullah. (2009). The Level of History Teacher Competence and its Relationship with Student Achievement in Low-Performing Schools. Malaysian Journal of Education. 34(1): 53-66.
- Amirul Mukminin Mohamad. (2023). The Effectiveness of Quiziz as an Alternative Review and Self-Learning Medium. Journal of Student Personalities. 23(2): 29-37.
- Booth, A. (1993). Learning History in University: Student Views on Teaching and Assessment. Studies in Higher Education. 18(2): 227-235.
- Chieng You Eng and Tan Choon Keong. (2019). Technological Pedagogical Content Knowledge in Malaysia: A Meta-Analysis Study. Journal of ICT in Education (JICTIE): 86-95.
- Chen, C. H. (2019). The Impacts of Peer Competition-based Science Gameplay on Conceptual Knowledge, Intrinsic Motivation, and Learning Behavioral Patterns. Educational Technology Research and Development. 67(1): 179-198.
- Darchinie Rani Ravendran & Md Yusoff Daud. (2020). Factors Influencing Primary School Mathematics Teachers in PdPc. World Journal of Education. 1(3): 24–33.
- Eddie M. Mulenga & Jose M. Marban. (2020). Prospective Teachers' Online Learning Activities in the Age of Covid-19: A Cluster Analysis Approach. EURASIA Journal of Mathematics, Science and Technology Education. 16(9):1872.
- Emilda Balkis Ismail and Anuar Ahmad. (2022). Students' Readiness to Apply the Use of Web 2.0 in History Subjects. Malaysian Journal of Social Sciences and Humanities. 7(2): 1-13.

- Hasniza Nordin. (2014). Pre-Service Teachers' TPACK and Experience of ICT Integration in Schools in Malaysia and New Zealand. University of Canterbury, New Zealand.
- Hassan Mirzajani, Rosnaini Mahmud, Ahmad Fauzi Mohd Ayub, Su Luan Wong. (2016). Teachers' Acceptance of ICT and its Integration in the Classroom. Quality Assurance in Education. 24(1): 26-40.
- Ministry of Education Malaysia. (2001). Educational Development 2001-2010: Integrated Planning to Generate Educational Excellence. Kuala Lumpur: AG Grafik Sdn. Bhd.
- Margaret L. Niess. (2011). Investigating TPACK: Knowledge Growth in Teaching with Technology. Journal of Educational Computing Research. 44(3): 299-317.
- M. Kaviza. (2019). Intrinsic Motivation Among Fourth Form Students Taking History. International Journal of Education, Psychology and Counseling. 4(31): 215-224.
- Mwila Prospery. (2018). Assessing the Attitudes of Secondary School Teachers Towards the Integration of ICT in the Teaching Process in Kilimanjaro, Tanzania. International Journal of Education and Development. 14(3): 223-238.
- Mahathir Yahaya and Wardatul Hayat Adnan. (2021). Challenges for Students through Online Learning: A Study of Public Higher Education Institutions in Malaysia. Journal of Media and Information Warfare. 14(1): 11-20.
- Mohd Mahzan Awang, Abdul Razaq Ahmad, & Nur Syazwani Abdul Talib. (2016). The Use of Multimedia in History Education in the 21st Century and its Relationship with History Learning Interest. Journal of Educational Thinkers. 7: 44-56.
- Mohd Norakmar Omar, Siti Noor Ismail, Mohan Rathakrishnan. (2021). The Use of Mobile Technology to Generate Digital Learning During Movement Control Order (MCO). International Journal of Education, Islamic Studies and Social Science Research (IJEISR). 6: 71-85.
- Mohamed Nazul Ismail (2020). Leadership Challenges in Digital Learning Management, Journal of Leadership Reflection Volume III, 2020 (ISSN 2636-9885).
- Narjes Ebrahimi Seraji, Roya Sediq Ziabari, Seyed Jalal Abdolmanafi Rokni. (2017). Teacher's Attitudes towards Educational Technology in English Language Institutes. International Journal of English Linguistics. 7(2): 176–185.
- Nor Sahayu Hamzah, Zaid Mohd Zin & Mohd Abdul Ghafar Mohd Ghazali. (2019). The Influence of Motivation on Learning Japanese Language Among Secondary School Students. International Journal of the Malay World Civilisation. 7(3): 41–50.
- Norehan Binti Mohd Nasir & Mahaliza Binti Mansor (2021). Teacher Challenges in Implementing Teaching and Learning at Home (PdPR): An Early Observation. Malaysian Journal of Social Sciences and Humanities (MJSSH), 6(7): 416-421.
- Punya Mishra & Matthew J. Koehler. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. Teachers College Record. 108(6): 1017-1054.
- Ryan, R. M. & Deci, E. L. 2000. Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. Contemporary Educational Psychology. 25(-): 54-67.
- Ridzuan Masri, Arman Ahmad & Razlina Abd Rani. 2018. Maslow's Theory in the Context of Meeting Basic Needs of Workers and Its Role in Improving Organizational Performance: A Study and Islamic Perspective. Journal of Hadhari. 10(1): 1-27.
- Ritchie Len Joon Woei, Soon Singh Bikar, Balan Rathaktishnan, and Zulfikar. 2021. Integration of Word Wall Media Games in History Education. Malaysian Journal of Social Sciences and Humanities. 6(4): 69078.
- Ramakrishnan, Renuka, Norizan Esa, and Siti Hawa Abdullah. 2013. The Effect of Using Digital History Resources on Historical Thinking Practices. Penang: USM.

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- Razak, N. A., Jalil, H. A., & Ismail, I. A. (2019). Challenges in ICT Integration Among Malaysian Public Primary Education Teachers: The Roles of Leaders and Stakeholders. International of Emerging Technologies in Learning. 14(24): 184–205.
- Sharifah Nor Puteh and Kamarul Azman Abd. Salam. 2011. The Level of Preparedness in Using ICT in Teaching and Its Impact on Performance and Behavior of Pre-School Students. Journal of Malaysian Education. 36(1): 25-34.
- Mohd Samsudin & Shahizan Shaharuddin. 2012. Education and teaching of history subjects in schools in Malaysia. 39: 116-141.
- Suvarmani Subban, Nor Asiah Razak, Habibah Ab. Jalil & Ismi Arif Ismail. 2020. Implementation of e-learning in the social and cultural environment at the transformation school (TS25) in Malaysia. Innovative Teaching and Learning Journal. 6(1): 32-51.
- Subban, S., Jalil1, H. A., Ismail, I. A., Razali, A. B., & Razak, N. A. (2020). Principal Approaches to Support E-Learning Integration in a Transformation School (TS25) in Malaysia. Attarbawiy: Malaysian Online Journal of Education. 4(2): 78–89.
- Zaharuzzaman Sulaiman and Jasmi, Kamarul Azmi. 2013. Learning Style and Its Relation to Student Motivation: A Review of Research in Secondary Level School of Andalus Education Centre in Singapore. In: First Postgraduate Seminar. Faculty of Islamic Civilization. June 26, 2013: 31-48.