



## **PEDAGOGICAL REVOLUTION: IMPROVING LITERACY OF HISTORY WITH LEARNING DIFFERENTIATING PROCESSES**

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### *Abstract*

Effective historical learning is the key to shaping students' awareness and deep understanding of past events. This article thoroughly examines the implementation of pedagogical innovation through learning differentiation processes to improve student history literacy. The research was conducted using a qualitative approach through comprehensive library and documentation studies. Research results show that the application of process differentiation learning can significantly adapt the teaching methods to students' individual learning needs, resulting in increased involvement and a deeper understanding of historical material. Furthermore, using Artificial Intelligence (AI) technology in support of differential learning strategies significantly positively impacts increased student learning motivation. This technology allows for better personalization and real-time feedback that can improve the quality of student learning experience. The findings underline the importance of adopting an innovative and flexible approach to historical learning, which enhances historical literacy and shapes students' character to become more critical and reflective.

**Keywords:** *Pedagogical Innovation, History Literacy, Learning Differentiating Processes, AI Technology, Student Engagement*

### **INTRODUCTION**

In an era of globalization and rapid technological development, the world of education faces the challenge of continuously innovating to improve the quality of learning and student learning outcomes. One of the most essential forms of innovation in this context is pedagogical innovation, which aims to improve learning methods to be more effective and relevant to the needs of students. Carvalho (Asmayawati et al., 2024) explains that pedagogical innovation refers to sustainable development and applying new teaching methods and strategies to enhance the learning experience. It includes adapting to the ever-changing needs of students and integrating the latest educational technologies.

Process differential learning is an instructional strategy that allows teachers to adjust learning methods to suit students'

abilities, interests, and learning styles. This strategy ensures that each student can learn optimally and have maximum learning outcomes. Process differential learning can increase student engagement and motivation and give them a deeper understanding of the materials taught. (Budirahayu & Saud, 2023)

Historical literacy is understanding, analyzing, and appreciating historical events and their impact on present and future life. Historical literacy is an essential tool for developing historical thinking skills. Historical education is working with historical materials, analyzing them, and producing valid interpretations. (Kurniawati et al., 2021). Therefore, innovative teaching strategies such as differentiation in the learning process are essential to improve historical literacy among students.

This article will discuss the importance of pedagogical innovation in historical learning,

learning strategies of process differentiation, and its impact on the improvement of the historical literacy of pupils. Some references from accredited national journals and relevant book sources will support the arguments presented, including research on pedagogical innovation, the effectiveness of differential learning, and effective educational strategies in historical learning. Through a deep understanding of these concepts, new and more effective ways of teaching history to students are expected so that they can have a better literacy of history and a strong sense of nationalism.

### **A. Pedagogical Innovation Concept**

Pedagogical innovation refers to applying new methods and strategies in the educational process to improve the quality of teaching and student learning outcomes. This concept covers various renewal forms in the teaching method, from using the latest technologies to more creative and adaptive learning approaches. Pedagogic innovation aims to create a more effective and attractive learning environment and meet the needs and challenges that are growing in the world of education.

Koehler & Mishra, 2008; Misha & Koehler, 2006 (Rossi & Trevisan, 2018) describe the teacher knowledge required to teach effectively with technology. Pedagogical innovation includes using Knowledge Content Educational Technology (TPACK), which allows teachers to develop learning by harmoniously integrating the material, technology, and pedagogical methods. This approach focuses on applying new techniques to address the challenges in education and improve student learning outcomes. For example, integrating digital devices such as tablets and educational applications into the curriculum can enrich student learning experiences and enhance their involvement.

Pedagogical innovation not only focuses on technology but also on developing teaching methods that respond to the needs of students. This includes applying project-based learning, collaborative teaching, and formative evaluation, enabling continuous learning process adjustment. Thus, pedagogical innovation is

essential in creating a more relevant and practical learning experience in the modern era.

### **B. Process Differentiated Learning Concept**

Rivki et al. (2007) state that a differentiated process is an instructional strategy that adjusts teaching methods to match students' abilities, interests, and learning styles to ensure optimal learning outcomes. Process differential learning is an instructional approach that adapts the teaching methods to students' abilities, interests, and learning styles to the best learning outcomes. The differentiated process involves varying activities and methods to help students process and understand information according to their needs. (Tomlinson, 2011). Learning process differentiation means adjusting the way students process and understand information. It involves variations in activities and methods to help students learn and master essential concepts and skills in a subject.

By adjusting how the material is delivered through visual, audio, or kinesthetic formats, teachers can help students with different learning styles understand the material better. Moreover, this strategy also involves using a variety of learning activities that enable students to learn according to their interests and strengths.

Differential learning is a teaching strategy that meets students' learning needs by adapting content, processes, products, and learning environments. This approach ensures that each student can learn in a way that best suits their abilities, interests, and learning styles. It helps create an inclusive learning environment that supports diversity in the classroom so that all students can reach their full potential.

According to Purnawanto, 2023 (Pramartha & Parwati, 2024), Differential learning aims to create equality among students according to their abilities and to bridge the gaps that occur in students during the learning process. Teachers need to understand the individual attributes of these participants so that teaching can adapt to their characteristics. Although the diversity of students in the classroom has been recognized in pedagogics for a long time, in the process of lessons by the

teaching achievements of these years, attention to the condition has not been maximum.

By adopting process-differentiated learning, educators can overcome the challenge of managing student diversity and creating a more personal and practical learning experience. This contributes to achieving better learning outcomes and developing students' individual potential.

### **C. Literacy History**

Seixas & Morton in (Marta et al., 2024) *Thinking Historically: Educating Students for the Twenty-First Century*, 2002. Historical literacy involves skills in using historical knowledge to make decisions and develop views about the world.

Historical education should enable students to participate in critical and reflective thinking about the past, including the ability to question and evaluate various historical perspectives and understand how such events affect modern society. By acquiring historical solid knowledge, students can gain a deeper insight into social, political, and cultural contexts and cultivate a sense of responsibility and social involvement.

Studying history thoroughly helps students understand their values and national identity, and they can also contribute to the nation's sustainable development.

### **D. Role of Artificial Intelligence Technology (AI)**

According to Murray Shanahan (Afrita, 2023)(Afrita, 2023), Artificial Intelligence (AI) is an intelligence that humans do not possess. Integrating AI technology into education has brought significant progress in personalized learning. AI can support learning process differentiation by providing real-time feedback and adaptive learning paths. As stated by (Kumar et al., 2023), artificial intelligence (AI) has gained significant educational advantages. AI has great potential to transform and enhance various aspects of today's education world. With support for machine learning algorithms and data analysis, AI technology provides new opportunities to personalize learning

experiences, improve teaching strategies, and optimize administrative processes. One of the major applications of AI in education today is the personalization of learning.

In recent years, AI's artificial intelligence technology has undergone significant developments that have had a massive impact on various fields, including academic and educational. One of the increasingly used AI applications is the Generative Pre-Trained Transformer or Chat GPT in human-computer interaction. Chat Generative pre-trained transformer (ChatGPT), today's popular AI chatbot, was developed by OpenAI, a California-based artificial intelligence research and implementation company. This AI model uses a transformer neural network, which can produce human-made text by understanding the context of the conversation as it is said. (Zhang & Lu, 2021).

In addition to ChatGPT, other AI applications have changed strategies in the learning process. For example, adaptive learning systems such as Knewton and DreamBox use AI to tailor lesson materials to students' individual needs and progress. AI applications in educational data analysis are also becoming increasingly popular, such as using Learning Analytics to monitor and analyze student performance in real-time, helping teachers make better decisions in the learning process. AI in the form of virtual assistants such as Siri and Alexa has also been integrated into learning environments to help students with their daily questions and tasks. Overall, AI technology has increased efficiency and personalization in education, creating a richer learning experience focused on individual needs.

AI-based educational tools can analyze student performance and suggest customized resources and activities. This helps meet each student's unique learning needs, enhancing their understanding and engagement. In addition, AI can help teachers identify students who may need additional support, enabling timely intervention.

### **E. Impact on Student Engagement and Motivation**

According to Paulsen & McCormick (Salas-Pilco et al., 2022), student involvement is complex. It is generally understood as the level of effort students put into learning activities, which is influenced by various factors and interactions in the learning environment. One significant result of using differential learning processes and AI technology is increased student engagement and motivation. Applying AI technology in learning positively impacts student motivation and involvement and improves learning outcomes. When students feel that their needs are met, they are more likely to participate actively and take ownership of their learning. Differential learning also encourages students to explore historical topics of interest to them, thus reinforcing the relationship with the subject matter. Students become more involved in learning by providing various ways to interact with content, such as through interactive simulations, digital storytelling, and collaborative projects.

## METHOD

This research uses qualitative designs that are descriptive and explorative. Sugiyono (2015) and (Umam & Ferianto, 2023) state that qualitative research studies objects in natural conditions. Descriptive-explorative qualitative research aims to describe complex realities and discover new meanings.

Moleong (2017) and (Juhriati & Rahmi, 2021) stated that qualitative research involves collecting data in a scientific context using natural methods and is carried out by researchers who are naturally interested in the subject. This research is descriptive, where the data is collected in words and images, not numbers. This is because the use of qualitative methods, as well as all the data collected, is potentially the key to the research. In line with this, the study aims to explore and describe learning differentiation processes to improve historical literacy comprehensively and holistically.

J.R. Raco (2010) Explains that qualitative descriptive-explorative research seeks to understand the meaning behind visible data. Therefore, in this study, researchers will seek to understand social interactions and interpret the perspective of research subjects related to

learning process differentiation to improve historical literacy.

The research uses this method to describe learning differentiation processes to improve historical literacy and explore aspects that have not yet been revealed. This aligns with Flick's (2014) view (Speidel, 2018), which states that qualitative descriptive-explorative research allows for in-depth exploration of topics that are not understood much.

The research adopted qualitative designs that were descriptive and exploratory but also integrated quantitative elements to enrich the analysis. In line with Moleong (2017) (Juhriati & Rahmi, 2021) in its qualitative aspects, the study uses in-depth interviews, participant observations, and documentary studies to explore and describe learning differentiation processes in improving historical literacy. This approach allows researchers to generate descriptive data from written or oral words of people and observable behavior.

Library study is essential in qualitative research because it builds a solid theoretical foundation. Researchers can identify key concepts, relevant theories, and previous research on learning process differentiation and historical literacy by studying libraries. And through documents is a stable, rich, and encouraging data source. In this study, document analysis will help researchers understand the context, policies, and learning practices of differentiating existing processes.

Finally, this research aims to describe and explore phenomena and produce a deep and contextual understanding of the differentiation of the learning process in improving historical literacy.

## RESULTS AND DISCUSSION

The results and discussion of this study aim to explore the application and impact of learning differentiation processes in improving historical literacy using a qualitative approach. By studying libraries and documentation, this research produces in-depth insights into how these strategies are applied and their effects on historical learning.

### I. Results

#### A. Library study:

Literary studies show that the learning theory of process differentiation, introduced by Wormeli in educational literature (Rivki et al., 2007), emphasizes that adapting learning according to student's individual needs can improve the learning process's effectiveness. Historical literacy involves understanding, analyzing, and interpreting historical texts and requires considering differences in student skills and learning styles. Existing differential learning models indicate that providing diverse teaching materials and adapting teaching strategies to students' needs can enhance their involvement and understanding of the historical material. In addition, literature studies also found that using technology in differential learning can facilitate the delivery of more adaptive material and enable faster feedback.

#### **B. Findings from Documentation:**

Documentation from the learning plan, textbooks, and evaluation records indicates that applying differential learning in a historical context involves adjustments in several aspects. The learning plans collected show different learning methods, including group projects, class discussions, and digital technology to adapt the material to different levels of student understanding. Textbooks, such as modules and worksheets, are also shown to vary in difficulty levels and types of activities offered. Evaluation records note that students engaged in differential learning improved historical literacy skills. Feedback from students indicated that they felt more engaged and motivated when the teaching material was tailored to their needs and interests. Evaluations showed an improvement in their ability to analyze and understand historical contexts, as well as an improved ability to write and argue about historical topics.

## **II. Discussion**

The results of this study support previous findings that learning process differentiation can improve historical literacy. Implementing learning strategies tailored to students' needs enables more personal and practical learning.

The findings align with the theories put forward by Wormeli in (Rivki et al., 2007) and (Marta et al., 2024) that learning that considers individual differences can improve student learning outcomes.

Digital technology supports differential learning by facilitating the delivery of adaptive material and enabling real-time feedback, contributing to students' better understanding of history. (Maulani, 2023) revealed that digital technology can increase students' motivation and interest in learning history, facilitate more meaningful learning, and support the development of historical thinking skills.

Evaluation records showing improvements in historical literacy also confirm the effectiveness of differential learning in improving historical analysis and interpretation skills. Feedback from students showed that they felt the benefits of an approach tailored to their needs, which contributed to their increased motivation and involvement in historical learning. As explained by (Almujab, 2023), Differentiated learning, with a tailored approach, is an essential strategy for creating a practical and inclusive learning experience.

Overall, the findings underline the importance of applying process differentiation learning in the context of historical literacy and suggest that this approach can improve the effectiveness of learning and student learning outcomes. The study also highlights the critical role of technology in supporting adaptive and personalized learning strategies. As explained (Putri, 2024), digital technology helps students to understand and appreciate historical material better, increases student involvement in learning, and increases student interest in learning.

Recommendations for future educational practices include further development of differential learning models and broader technology integration to support individual student needs in historical learning.

## **CONCLUSION**

In the era of modern education, in historical learning, pedagogical innovations such as learning process differentiation have proven to improve student history literacy significantly.

This approach allows teachers to adapt their learning methods to suit each student's needs, interests, and abilities so that each individual can receive relevant and meaningful learning. Research results show that students become more engaged and have a deeper understanding of historical material by paying particular attention to individual differences in the learning process.

Furthermore, the application of artificial intelligence (AI) technology in support of differential learning has had a positive impact that cannot be neglected. AI technology enables real-time personalization of learning by providing live feedback and adaptive learning paths. It not only increases the motivation of students to learn but also ensures that each student can learn according to their respective rhythms and learning styles. With this technology, teachers can more easily identify students' specific needs and provide timely interventions so that no students are left behind.

The findings of this study confirm the importance of adopting an innovative and flexible teaching approach in historical education. Therefore, learning process differentiation helps students understand historical events better and encourages them to be critical and reflective thinkers. With AI technology's support, this approach creates a more dynamic and interactive learning environment where students feel more appreciated and motivated to explore lessons in depth.

Therefore, to achieve a more holistic and inclusive educational goal, educators must continue to find and implement learning strategies that can accommodate the diverse needs of students. Using pedagogical innovations and advanced technologies such as AI is not just a trend. Still, it is an innovation and a must for teachers or educators to ensure all students reach their full potential. Thus, applying differential learning processes and AI technology in historical education improves historical literacy and forms the character of students who are more prepared to face future challenges with strong critical thinking skills and a deep understanding of history.

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