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The Influence of Educational Digitalization Policy on Secondary School Students' Learning Motivation

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ABSTRACT

This study aims to self-determination theory approach. This theory emphasises the importance of three basic aspects in building intrinsic motivation, namely autonomy, competence, and connectedness. In the context of digital policy, these three aspects are crucial to be studied further in order to understand how technology contributes to students' enthusiasm for learning. The method used is library research with a qualitative approach. Data were collected from various literature sources, such as scientific journals, books, and policy reports that are relevant to the theme of educational digitalisation and learning motivation. The analysis was carried out thematically to explore the relationship between digital policies and students' psychological conditions in the learning process. The results of the study show that digitalisation policies can increase students' learning motivation if supported by adequate facilities, teacher training, and a fun learning approach. However, in areas that are less ready in terms of infrastructure, this policy actually creates gaps and reduces learning enthusiasm. Therefore, an inclusive and contextual implementation strategy is needed so that digitalisation really has a positive impact on students' learning motivation.

1. INTRODUCTION

The world of education is undergoing a digital transformation, which is a strategic response to global dynamics marked by the rapid advancement of information and communication technology. The modern world of education requires an update to the learning system. It must utilise digital technology as the main medium for conveying information and creating modern century skills. In this regard, the government has established a policy of digitalizing education as part of the reform of the national education system. The goal is to create a technology-based, adaptive, and collaborative learning ecosystem.

The digitalisation policy of education aims to address global challenges while providing students with broader, more flexible, and more interactive access to learning resources. The implementation of this policy can be seen in various programmes, including the provision of information and communication technology (ICT) devices in schools, the integration of LMS-

based learning management systems, and teacher training in learning technology. Theoretically, a digital-based learning approach is considered to have the ability to increase the effectiveness of the learning process, increase student engagement, and ultimately have a positive impact on learning motivation.

However, the success of this policy is highly dependent on how ready the infrastructure and human resources are at the implementation level. The reality on the ground shows that some educational institutions are not ready to support the digitalisation process. One structural problem that has not been fully addressed is the difference in facilities between urban and rural schools. Many secondary schools in remote areas do not have stable internet, sufficient devices, or teachers who are proficient in using digital technology. The process of digitalizing education becomes ineffective due to the lack of these technological needs.

This condition has a direct impact on student learning, especially on their motivation. Digitalisation that is implemented without preparation actually adds to the burden on students rather than being a solution. Students often experience difficulties in using complex applications, fatigue due to too many online assignments, and confusion due to the lack of direct guidance from teachers. This causes learning stress, boredom, and decreased interest in learning. The self-determination theory approach can be used to analyse this condition in the context of learning motivation theory. The need for social connectedness, autonomy, and competence are important components that must be met so that intrinsic motivation can develop optimally.

In addition, the policy of digitalisation of education must consider the pedagogical, psychological, and sociocultural aspects related to the teaching and learning process. One of the main factors that determines the success of learning is learning motivation. It cannot be separated from meaningful learning design, a supportive learning environment, and positive interpersonal relationships. To determine how digitalisation of education affects the learning motivation of high school students, researchers need to conduct empirical studies. This needs to be done both directly and through mediating variables such as teacher readiness, adequacy of facilities, and digital learning design.

One of the objectives of this study is to provide a scientific contribution to the discussion on how effective digital education policies are in Indonesia. This study focuses on the influence of educational digitalisation policies on students' desire to learn in secondary schools. It also looks at various inhibiting factors that may hinder the implementation of the policy. This study aims to find an empirical relationship between digitalisation and learning motivation. It will also look at the context and challenges that schools face when implementing the policy. This study will use a qualitative and/or quantitative approach.

The main research questions are: (1) How does the digitalisation policy in education influence students' motivation to learn in secondary schools? (2) What are the components that affect the level of success of implementing the digitalisation policy of education in schools? It is hoped that the results of this study will not only increase our understanding of the phenomenon of digitalisation and its impact on student learning psychology but also provide practical suggestions for policy makers, school administrators, and educators in designing and implementing digitalisation strategies that are more contextual, efficient, and in accordance with student needs.

2. THEORETICAL BASIS

a. Digitalization of Education

Digitalization of education is a major change in the learning system that involves the integration of information and communication technology into all aspects of the educational process, including planning, implementation, evaluation, and management of educational management. (Sihotang, 2025) This change is more than just a shift from manual to digital systems, it is also a paradigm shift in education towards a more flexible, open, and technology-based learning ecosystem. UNESCO (2020) states that the goal of digitalizing education is to

create a sustainable learning system, flexible to changing times, and inclusive for all groups of students. (Unesco, 2020)

Digital learning allows students to access lessons anytime and anywhere. (Hsb, 2024) Learning Management Systems (LMS), e-learning platforms, and various online-based educational applications have made the learning process no longer limited to physical classrooms. (Verawati et al., 2023) This will definitely help expand access to education, especially in previously hard-to-reach areas. (Syafii, 2018)

However, the implementation of digitalization of education is highly dependent on ready infrastructure and supporting ecosystems at the educational unit level. (Hermawansyah, 2021) It is essential that resources such as digital learning spaces, internet connections, and tablets are available. The main goal of digitization can be hampered if there are limitations in access to these methods. The digital divide, also known as the digital divide, is created by these limitations.

The success of digitalization is highly dependent on the infrastructure and competence of human resources, especially teachers. Teachers must not only be proficient in technology, but they must also be able to create innovative, interactive, and fun digital learning. (Anita et al., 2025) Therefore, continuous training that is not only technical, but also pedagogical is needed so that teachers can integrate technology with a student-centered learning approach.

Digitalization depends on policy. Digitalization will only be a slogan without real implementation if the government does not create comprehensive and adaptive policies. (Yakin et al., 2025) They must provide a regulatory framework that supports the implementation of technology in schools through funding, contextual curriculum development, and regular evaluation of policy effectiveness. (Pawartani & Subuatningsih, 2024)

Digitalization must also be considered in the context of students' culture. The shift from face-to-face to digital learning requires changes in learning discipline, time management, and independence. (Sholeh & Efendi, 2023) Pedagogical interventions are needed that help students make good use of technology, as some students are not ready to learn independently. (Zubaidah, 2016)

Therefore, the digitalization of education is a process that involves many things, including technology, culture, human resources, and policies. To run it successfully, various components must work together well, and continuous evaluation is carried out to adjust it to changes in the times and student needs. (Farid, 2023)

b. Motivation to learn

One of the important factors in the educational process is learning motivation, which significantly affects the level of cognitive, affective, and conative involvement of students in the learning process. Internal factors (such as needs, interests, and perceptions of self-competence) and external factors (such as incentives, learning environment, and interpersonal relationships) shape motivation, which is a combination of various factors. (Pratiwi, 2015) Self-Determination Theory by Edward Deci and Richard Ryan, divides learning motivation into two categories: intrinsic and extrinsic. Both fall within a range of regulation, from amotivation, or lack of motivation, to intrinsic regulation, which is completely internalized. (Deci & Ryan, 2000)

Learning motivation can no longer be understood statically in modern educational practices, especially in the digital ecosystem that increasingly dominates the learning space. It must be understood as a dialectic between agents (students) and structures (digital learning systems). Those who have intrinsic motivation will have high levels of engagement, resilience in facing academic challenges, and the ability to learn independently. Conversely, lack of motivation often leads to low participation, weak emotional attachment to tasks, and vulnerability to symptoms of academic disengagement. (Simorangkir, 2022)

The digitalization of education has great potential to increase learning motivation if done in a transformative way. This means that it must be based on a deep understanding of students' psychological needs and not just visual or mechanical goals. Learning can be made more

personal and engaging by incorporating interactive media, augmented reality, game-based learning, and adaptive learning systems. (Hertina et al., 2024) This process allows students to explore the material in a more meaningful way. Ultimately, this will increase their sense of responsibility and their perception of their own abilities.

However, this potential does not happen automatically. Unsuccessful digitalization often becomes a new source of frustration for students, especially in cases where the learning methods used are too repetitive, not responsive to differences in learning styles, and ignore the relationship element in learning. This shows that digital learning design cannot be separated from humanistic pedagogy and educational psychology. Students experience alienation in the learning process that should be collaborative and transformative if digital learning only focuses on providing content and ignores the presence of relationships. (Suhara, 2025)

In this regard, the design of digital pedagogy should be based on three basic psychological standards: autonomy, competence, and social connectedness. Flexibility in determining when, how, and how learning activities increase autonomy. Formative assessment systems increase competence by providing constructive feedback and opportunities for reflection and revision. Meanwhile, social connectedness should be built through cooperative learning, virtual discussion forums, and the presence of teachers who function as not only educators but also mentors and coaches. (R. Ramadhani et al., 2023)

In addition, as an essential part of the digital education ecosystem, teachers must have expertise in two areas: technology and pedagogy. They are not just delivering materials; they are more than that, they can build learning experiences for students and combine technology with their personal needs. Therefore, teacher training should focus on technical matters in addition to improving teachers' abilities to be more reflective, empathetic, and pedagogical. (Maisura et al., 2023)

Ultimately, learning motivation in the digital era must be placed within a broader epistemological framework because it is the result of a collaboration between individual student initiatives and the structure of the digital education system. Future research should pay attention to how digital education policies, technology-based teaching practices, and students' psychological traits function dynamically to determine the quality of their learning motivation. Therefore, digital transformation is not only a technological endeavor but also a humanitarian endeavor because it enables learning through digital media to become more humane.

c. Policy Implementation Theory

The public policy cycle consists of a crucial phase called policy implementation. This phase represents the shift from standard formulation to administrative and technical practice. It is more than an administrative process; it is an ever-changing field of interaction between ideas, actors, structures, and socio-political contexts. Through the theoretical framework of policy implementation, Mazzmanian and Sabatier, underline that the success of implementation is largely determined by three main pillars: clarity and consistency of policy objectives, availability of resources, and the ability and commitment of implementers.

In terms of digitalization of education, clarity of policy objectives is crucial to determine the way forward. It is essential to have clear objectives for the policy, whether it aims to democratize access to education, build competencies that are in line with the modern era, incorporate technology into education, or transform the education ecosystem as a whole. Fragmentation in implementation will occur if the definition of objectives is unclear or unclear, especially at very different regional levels. (Indranata, 2024)

In addition, the main components of digitalization policies are resources, whether physical, financial, human, or institutional. In order for policies not to stop at the symbolic level, technological infrastructure is needed (such as the internet, ICT devices, learning management systems), teacher needs-based training, and technical support for problems. Empirical reality shows that digital inequality, also known as digital inequality, is still a structural problem,

especially between urban and rural areas. The implementation gap is directly influenced by this problem.

The policy actor aspect is also important. Successful implementation depends on the commitment, competence, and readiness of teachers, principals, and educational institution managers. Digitalization is not only about technology; it is also about changing the work culture and teaching paradigm. Teachers must be trained to be lifelong learners, adaptive to technology, and able to help students focus on learning. Principals must be transformative digital leaders; they must be able to create a shared vision and create a school culture that supports innovation. (Wahyudi & Khotijah, 2021)

External factors are also an arena of competition that cannot be ignored. Strategic partnerships with the private sector, especially the educational technology sector and parental participation, political support from the central and regional governments, and civil society participation can strengthen the implementation ecosystem. The existence of a responsive monitoring and evaluation system is very important to find errors, correct errors, and ensure policy accountability. (Mariyono, 2024)

In many cases, failure to implement education policies is not due to the design of the policy itself, but to governance failures, including lack of cross-sectoral coordination and ineffective oversight mechanisms. Consequently, it is critical to use a bottom-up approach that allows stakeholders to collaborate, allows for local initiatives, and is flexible to different contexts. Empowering local actors accelerates adaptation and increases the legitimacy and sustainability of policies. (SF Ramadhani, 2024)

Therefore, the implementation of educational digitalization policies must be seen in an interactive and systemic context rather than as a structured and linear process. Policy implementation theory offers the analytical perspective needed to fully understand this complexity. It also provides the basis for the formation of inclusive, contextual, and results-oriented implementation strategies. If we understand the important aspects of the structural and cultural implementation of digital transformation in education, we can only see the change as real, sustainable, and equitable. (Gusty et al., 2023)

3. RESEARCH METHODS

This study uses a library research approach, namely a scientific method carried out through a systematic review of relevant literature to answer the problem formulation theoretically and conceptually. This approach was chosen because the focus of the study is on the influence of educational digitalization policies on student learning motivation, which requires an in-depth analysis of theories, policy documents, and previous research findings.

Data sources are obtained from scientific journals, reference books, research reports, national and international policy documents, and official publications from institutions such as UNESCO and the World Bank. These sources are selectively selected based on relevance, actuality, and academic credibility.

Data collection techniques were carried out through documentation studies by examining three main focuses: (1) the concept and implementation of educational digitalization, (2) learning motivation theory, and (3) implementation of public policy. The collected data were analyzed using the content analysis method, namely grouping information based on themes, connecting variables, and drawing argumentative and logical conclusions.

Data validity is maintained through source triangulation and content criticism, to ensure that the resulting interpretation is free from bias and has a strong scientific basis. Thus, the research results are not only descriptive, but also build a theoretical framework for broader policy analysis.

This approach is an important foundation in understanding the extent to which digitalization policies are able to influence students' learning motivation and the factors

inhibiting their implementation, as well as providing conceptual recommendations for the development of inclusive and sustainable digital education.

4. RESULTS AND DISCUSSION

As a strategic response to rapid global changes, especially in the field of information and communication technology, the world of education is currently experiencing a significant digital transformation. A modern and flexible learning system must use digital technology as the main medium in the learning process to address this transformation. The goal of the Indonesian government's education digitalization policy is to create an inclusive, adaptive, and collaborative education ecosystem.

Various efforts that demonstrate the implementation of the policy include the provision of information and communication technology (ICT) devices in schools, integration of learning management system (LMS) platforms, and teacher training on the use of learning technology. Digital learning can increase student participation, learning effectiveness, and their desire to learn. Field research shows that the success of this policy is highly dependent on ready human resources and infrastructure.

It is not easy to implement digitalization of education because of the differences between urban and rural schools. Many schools in remote areas face problems such as unstable internet access, lack of information technology (ICT) devices, and teachers' inability to use digital technology. These conditions hinder the use of digitalization and have a direct impact on students' learning motivation. Digitalization without proper preparation actually adds to the burden on students rather than solving it. They have difficulty running learning applications, feel tired from too many online assignments, and are confused because they do not have direct guidance from teachers. Therefore, people often feel bored, stressed, and uninterested in learning.

This condition shows that the digital learning process does not meet students' psychological needs, such as social connectedness, independence, and ability. If these needs are not met, students' intrinsic motivation will be more difficult to develop, which in turn will impact their overall learning outcomes.

In addition, the digitalization of education is not the only factor; learning design must also consider sociocultural, pedagogical, and psychological aspects. Some things that can increase students' motivation to learn are a learning environment that helps them, positive relationships with others, and a digital education design that is meaningful and tailored to their needs. As facilitators and mentors who combine pedagogical and technical skills to support digital learning, teachers play an important role.

Theoretically, the implementation of education digitalization policies must be supported by clear objectives, availability of resources, competence, and commitment of implementers in the field. The reality, however, shows that resource inequality, workforce readiness, and fragmentation of objectives continue to be major obstacles. Therefore, cooperation between the government, schools, teachers, parents, and the private sector is essential to building a useful and long-lasting digital ecosystem.

This study shows that digital transformation in education is a complex process that includes changes in learning and teaching culture as well as the adoption of technology alone. Although successful digitalization can significantly increase students' desire to learn, the policy can have a negative impact if it is not supported by adequate readiness and support.

As a result, it is necessary to improve technological infrastructure in each region, provide intensive and continuous teacher training, and develop digital learning models that take into account the social and psychological needs of students. This is expected to maximize the benefits of digitalization of education to improve the quality of education and encourage students to study in secondary schools.

5. CONCLUSION AND SUGGESTIONS

a. Conclusion

To answer the challenges that arise worldwide in the era of advances in information and communication technology, digital transformation in the world of education is a strategic step taken. The goal of the government's policy for the digitalization of education is to create an educational ecosystem that is technology-based, adaptive, collaborative, and inclusive. Digitalization is expected to increase access, effectiveness, and motivation for student learning through various programs, such as the provision of ICT devices, LMS system integration, and teacher training.

However, there are challenges in implementing this policy. One of the main obstacles to achieving equitable digital learning is the disparity in infrastructure and human resources, especially between rural and urban schools. If students do not use technology well, they are at risk of experiencing stress, boredom, and disengagement in learning. Therefore, the digitalization of education does not only need to rely on technological advances; it also needs to consider pedagogical, psychological, and sociocultural aspects.

The theory of learning motivation, especially the theory of independence, is used as a basis for building a successful digital learning system. Digital learning must provide space for skill development, social connectedness, and autonomy to encourage students' intrinsic motivation. In other words, digitalization must concentrate on the human aspect of education rather than just being a tool for disseminating data.

Therefore, the success of the education digitalization policy is highly dependent on the readiness of infrastructure, teacher capabilities, relevant pedagogical design, and sensitivity to the socio-cultural context of students. Further research is needed to determine the extent to which digitalization affects secondary school students' learning motivation and to find elements that support and hinder the policy.

b. Suggestion

1. For Teachers

Teachers as the main actors in the learning process need to continuously improve digital competence, not only in the technical aspects of using technology, but also in understanding pedagogical approaches that are appropriate to the digital environment. Teachers are expected to be able to design learning that is personal, collaborative, and intrinsically motivating for students while still paying attention to differences in learning styles and emotional needs of students.

2. For Students

Students need to be given an understanding and training in digital literacy from an early age so that they can become independent, critical, and responsible learners. In addition, it is important to encourage students to be able to manage their learning time well, maintain a balance between online and offline activities, and build learning motivation from within themselves based on their own interests and life goals.

3. For Further Research

This study opens up space for further, more in-depth and specific studies on the relationship between digitalization and student learning motivation. Further researchers are advised to take a quantitative approach with a more complex analysis model, or a qualitative approach with participatory observation in various regions and levels of education, in order to obtain a more comprehensive picture of the dynamics of educational digitalization policies in Indonesia.

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