# DIGITAL STORYTELLING AND PODCASTS: ISLAMIC STUDIES PROJECT AS AN INNOVATIVE MODEL FOR LANGUAGE EDUCATION IN THE DIGITAL AGE

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#### **Abstract**

The development of digital technology has brought significant changes to language learning strategies, including the integration of creative media such as digital storytelling and podcasts. The Islamic Studies Project is an initiative that utilizes both media to teach language while introducing Islamic history and culture in a contextual manner. This study aims to examine how the Islamic Studies Project developed an innovative language learning model based on Islamic history content packaged through digital and audiovisual narratives. This research approach used a qualitative case study method with data collection techniques such as video and podcast content analysis, in-depth interviews with the creative team, and observation of audience interactions on social media platforms. The results showed that the integration of digital storytelling and podcasts can increase participants' vocabulary, deepen their understanding of the cultural context, and encourage active audience engagement in the learning process. The success of this model lies in its ability to combine communicative language, engaging visuals and audio, and historical narratives relevant to the needs of the digital generation. Furthermore, the Islamic Studies Project serves as a medium for preserving cultural heritage through the documentation of local narratives and Islamic history presented in a creative format. These findings suggest that the combination of digital storytelling and podcasts has the potential to be an effective alternative approach to language education in the digital era and can be replicated in other language learning contexts with content tailored to local cultural characteristics.

Keywords: Language Education, Digital Storytelling, Islamic Studies Project



#### INTRODUCTION

According to the Big Indonesian Dictionary, "digital" means relating to numbers for specific calculations or numbering. Digitization is the efficient use of computer systems, enabling optimal analog-to-digital data conversion. This facilitates faster and more comprehensive data processing, storage, and transfer (Suparyanto and Rosad 2020). The rapid rise of digital theory is linked to advances in information technology, the internet, and smart devices. As Don Tapscott emphasizes, today's digital economy makes knowledge a key asset. This asset is optimized through digitalization and virtualization in business and social interactions. Various digital innovations, including Artificial Intelligence (AI), the Internet of Things (IoT), and virtual reality, are fundamentally revolutionizing the way humans interact, work, and acquire knowledge (Suparyanto and Rosad 2020). Digitalization, more than just a tool and medium, is essentially transforming culture and patterns of human interaction, including the education sector. Digital theory now serves as a basic framework for designing a modern education system that adapts flexibly and integrates effectively with technology. Overall, the digital world is a tool that helps humans carry out activities that save time and transactions (Belay 2022). According to Martin in Uah Maspuroh et al. (2022), explains that the proper use of digital devices is a person's ability to access, manage, integrate, evaluate, analyze digital resources with the aim of creating creative media, communication and knowledge to realize social development in certain aspects. Regarding digital literacy, Badwen has the view that the concept of digital literacy emerged as a combination of two understandings, namely computer literacy and information literacy in the 1980s to 1990s when the widespread use of computers among the public and information became easier to access, operate, and disseminate through the internet network (Mukhofifah and Umi 2022). There are four main components of digital literacy, including:

a. basic digital literacy skills which means being able to read, write, interpret symbols and calculate as well as basic computer literacy skills including mastery of computer hardware and software.

b. background knowledge information an individual's understanding of information,

both digital and non-digital, that is created and accessed with the aim of enabling a person to find and discover relevant sources of information according to their needs.

c. core competencies of digital literacy In the main competition, digital literacy requires an understanding of various digital and non-digital information formats, creating and distributing digital information, evaluating the quality and validity of the information found, and then implementing knowledge, information literacy skills, and media literacy in various contexts.

d. attitudes and perspectives on information use There are three important areas that support attitudes and perspectives on the use of information, namely independent learning (being able to learn independently or alone), understanding the use of information (understanding how to use information correctly and ethically) and understanding copyright (being aware of the importance of copyright and how to respect it) (Mukhofifah and Umi 2022)

#### LITERARY REVIEWS

This study employs a qualitative approach using library research, as the focus lies on conceptual analysis of digital storytelling and podcasts as innovative models for language education within the framework of Islamic studies. The data were obtained from various sources, including academic books, journal articles, conference proceedings, and online publications relevant to digital storytelling, podcasts, language education, and Islamic literature that emphasizes the integration of spiritual values in learning. Data collection was conducted through systematic literature searches using appropriate keywords, with a priority on the most recent publications within the last ten years. The collected data were analyzed using content analysis through several stages: data reduction, categorization, interpretation, and conclusion drawing. This analysis aims to explore the interconnections between digital storytelling, podcasts, and language education grounded in Islamic studies, thereby formulating an innovative learning model relevant to the digital era. To ensure the validity of the findings, triangulation of sources was applied by comparing various scholarly works from different authors and contexts, complemented by peer



debriefing with academics in language education and Islamic studies to strengthen the interpretation.

#### RESULTS AND DISCUSSION

A. The Islamic Studies Project Exemplifies Innovative Language Learning Models in the Digital Age A major shift in the educational landscape occurred when digital technology began to be integrated into learning practices. In the field of language learning, technology serves not only as a tool but also as a new space, enabling the emergence of more creative, contextual, and participatory learning models (Anderson, 2020). In this context, the Islamic Studies Project can be seen as an initiative that exemplifies how digital innovation can enrich language learning methods with historical and cultural influences. Through this program, language learning is no longer limited to printed texts alone, but rather integrated with creative media such as podcasts and digital storytelling. Students are invited to listen to narratives of Islamic history, watch visual documentation of cultural journeys, and even compose reflections in written or audio recordings. In this way, they practice listening, speaking, reading, and writing skills in a single, meaningful learning experience (Prensky, 2010). The Islamic Studies Project's primary uniqueness lies in its integration of Islamic historical and cultural content into language learning. Narratives about the tombs of scholars, historical sites, or local religious traditions serve as teaching materials that not only enrich vocabulary and language structure but also deepen cultural literacy. This approach aligns with the Content and Language Integrated Learning (CLIL) framework, which emphasizes language acquisition through engagement with authentic, substantive materials (Coyle, Hood, & Marsh, 2010). Thus, language is not learned artificially, but through contextual experiences. Furthermore, the Islamic Studies Project aligns with the need to master 21st century competencies. Through collaborative activities such as podcast production or digital narrative writing, students are challenged to develop creativity, critical thinking, and communication skills. This reflects the principle of participatory pedagogy, which positions students as active subjects in the learning process, not merely passive recipients of information (Freire, 1998). Thus, this project not only trains language skills but also fosters digital literacy, essential for the global era. From a language education



perspective, the Islamic Studies Project can be viewed as a model that combines three aspects simultaneously: language acquisition, strengthening cultural identity, and developing digital skills. Its presence demonstrates that language learning in the digital age can be designed innovatively without abandoning scientific values and local wisdom. This model also emphasizes that language learning is not simply about mastering linguistic structures, but rather building bridges of understanding across cultures and histories. B. Digital Implementation of Education Education is a process aimed at changing human attitudes and behavior through teaching and training, with the goal of developing maturity. In other words, education is a form of effort and a method of educating (Maunah and Bintank 2022). The definition of educational theory according to Mudyahardjo (2010) in (Fuad Abrurahman, LR Retno Susant, Siti Dewi Maharani 2022) educational theory is a composition of several concepts that function as a basis for thinking that is useful as a starting point or foundation for building a theory and definition that provides connotative and denotative meaning to the terms used in the theory. Meanwhile, according to Moore (1974) in (Fuad Abrurahman, LR Retno Susant, Siti Dewi Maharani 2022) it is a collection of explanations that are arranged rationally and systematically that focus on discussing important aspects of education as a system. In Law (UU) Article 1 No. 20 of 2003 which discusses the National Education System, it is stipulated that education is a conscious and planned learning effort so that students actively develop their potential to have spiritual religious strength, self-control, society, nation and state (Habe and Ahiruddin 2017). Several understandings regarding educational theory were put forward by experts, including: a. Edward Humrey "Education means increase of skill of development of knowledge and under competition as a result of training, study or experience". (Education means the improvement of skills, development of knowledge and understanding as a result of training, study or experience). b. Ki Hahar Dewantara He stated that education is an effort to demand or guide all innate potential (nature) that exists in children with the aim that they can grow and develop optimally, both as individuals and as community groups, so that they can achieve the highest safety and happiness (Maunah and Bintank 2022). c. H. Fuad Ihsan In his book, "Fundamentals of Education," he defines education as a human endeavor to develop all of one's potential, both physical and mental. This development must align



with prevailing values in society and local culture. Through education, values and norms can be passed down from one generation to the next. This aims to maintain and develop the life of the community itself. d. John Dewey He, who is an American philosopher, psychologist, and educational reformer, expressed his opinion on education, that education is a process of developing fundamental abilities in individuals which includes intellectual and emotional aspects to form an understanding and constructive interaction with the environment, both nature and fellow humans (Faaizah 2023). Education plays a crucial role in reducing students' cognitive load, particularly by optimizing digital technology. Cognitive load refers to the amount of information the brain processes at any given time (Ubaidah 2022). Over time, digital technology has influenced the evolution of conventional learning methods, making them more efficient. Through digital learning methods, forums can be tailored to needs, enabling remote collaboration to enhance creativity, and fostering interactive discussion. With technology, educators have a new way of working by distributing assignments and exams digitally using Learning Management Systems (LSM) such as Google Classroom (Najwa Salsabila Putri and Marsofiyati Marsofiyati 2024). A theory first proposed by George Siemens in 2004 and further developed by Stephen Downes in 2005. This theory discusses Connectivism, a learning model that emphasizes the importance of establishing connections between various information sources, such as digital social networks, to facilitate learning. In short, Connectivism theory is specifically designed for the learning process in the digital era. According to Downes (2008), the Connectivism-based learning model must go through four stages to be able to run effectively, including: e. Aggregation: the collection of diverse information from various sources, such as educational articles or videos. f. Relationship: linking new information to pre-existing knowledge or experience. g. Creation: processing previously collected information into new knowledge, such as making digital notes. h. Sharing: knowledge that has been gained and understood is then distributed to other people through digital media such as blogs or social media (Ubaidah 2022). The development of digital technology in the 21st century has revolutionized the world of education. While technology was once merely a tool, it has now become a key component in shaping learning methods. This change has undoubtedly occurred through several stages, starting with the use of basic technology,



then evolving into the use of Artificial Intelligence (AI), and finally the Industry 4.0 concept, which is transforming global education. Various innovations have emerged, such as online learning platforms, Virtual Reality (VR), blockchain, and Internet of Things (IoT) systems, making education seem smart. Understanding this technological evolution is crucial to ensuring education can adapt to the Industrial Revolution 4.0 and to prepare the younger generation to face the challenges of the future (Oktika 2022). 1. Digitalization and education 4.0 According to Oktika (2022), digital education 4.0 is a learning method utilizing digital technology and cyber systems that emerged as a response to the development of the Industrial Revolution 4.0. This development allows teachers to move faster and more advanced in delivering related material. This is in line with the opinion of Sabaruddin (2022) who stated that education in the Industrial Revolution 4.0 era develops human abilities and capabilities, adapts and updates educational components, and effectively integrates technology into the learning and teaching process. Education in the 4.0 era prioritizes skill development, especially critical thinking skills. These abilities cover a wide range of things, from analyzing, assessing, and evaluating information, to making logical decisions. 2. Digital ecosystem and artificial intelligence (AI) The next stage in the evolution of educational technology is the emergence of a digital ecosystem fully connected with Artificial Intelligence (AI). This ecosystem consists of various interconnected elements, ranging from hardware and software, to learning management systems, academic data, and various supporting applications. The inclusion of AI in the digital ecosystem can provide opportunities to create learning experiences that are tailored to individual needs, adaptive, and tend to be more effective. According to (Jannah et al. 2025) Artificial Intelligence (AI) is a strategic need for education in Indonesia because it is considered to have several key capabilities, such as being able to recommend personalized learning materials, automatically correct assignments, and provide chatbots to assist students as virtual tutors. Sihaloho and Napitupulu (2024) also found that AI has been applied in various educational fields in Indonesia. Examples include the use of chatbots (virtual assistants) as science learning aids, social robots for religious studies, and automated systems for evaluating learning outcomes. However, they noted several obstacles, including high implementation costs, limited government regulations, and ethical issues related to data use. It can be



interpreted that the role of AI not only goes beyond technological trends, but also functions as a key instrument for creating a digital education ecosystem that is able to adapt and respond well to learning needs. 3. Digital technology innovation in education Through various innovations aimed at enhancing learning experiences, digital technology in education has evolved into web-based applications, including Learning Management Systems (LSM), Massive Open Online Courses (MOOCs), and the use of mobile applications to facilitate flexible language learning for students. Furthermore, the use of Virtual Reality (VR) and Augmented Reality (AR) offers immersive learning environments. Both technologies enable students to explore and understand cultural contexts in a more interactive and effective manner (Anhar et al. 2024). A similar finding was found in research (Chairunnisa and Masyhuri 2024), which found that in addition to increasing the use of interactive learning applications, the learning environment tends to be more responsive. Information technology integration is also rooted in accessibility to online learning resources, such as e-books, articles, and learning videos, which can be accessed anytime and anywhere. Current learning applications and platforms equipped with practice questions, educational games, and online discussion forums can encourage active student participation, leading to a deeper understanding of the material. The implementation of digital education in Indonesia is currently advancing. This is driven by various strategic programs aimed at integrating technology into teaching and learning activities at all levels of schooling. The following is a summary of the implementation of digital education in Indonesia: 1. Digital Classroom program in secondary schools This program has been implemented in several schools due to careful planning, curriculum adjustments, and teacher training. However, the quality of infrastructure varies across schools and digital literacy among teachers is limited (Saputra, Yayuk, and Tinus 2025). 2. Digital transformation in education through government policies Through the Ministry of Education, the government has taken significant steps in its plan to revolutionize digital transformation in education. One example is the issuance of Regulation No. 7606 of 2023 from the Directorate General of Teachers and Education Personnel, which explicitly directs technology-based teacher and principal performance management. However, several challenges remain, particularly in remote areas, including limited infrastructure and limited internet access (Saputra et al. 2025). 3. Use



of e-learning at UIN Raden Mas Said Surakarta As a precautionary measure against the impact of Covid-19 in Indonesia, UIN Raden Mas Said Surakarta has established a webbased learning system with an academic information system for lecturers and students for various learning activities such as discussions, assignment submissions, lecture material delivery, and online exams. Through e-learning, it is hoped that the learning process at UIN Raden Mas Said Surakarta will be more flexible, efficient, and easily accessible. This will enable students to access it wherever they are, as explained in the e-learning guide for lecturers (Saputra et al. 2025). Digital transformation has brought significant changes to the world of education, including language learning and Islamic studies. The Islamic Studies Project serves as a concrete example of how digital education can be implemented creatively, contextually, and interactively. This project integrates digital media—such as podcasts, digital storytelling, and online platforms to convey Islamic history, traditions, and culture in a format that is more accessible to students. With this approach, the learning process is no longer limited to conventional classrooms but can occur anytime and anywhere, in line with the principles of lifelong learning in the digital era (Anderson, 2020). In its implementation, the Islamic Studies Project uses narratives of Islamic history as the primary content of language learning. For example, when students are invited to explore local religious traditions such as the Yaa Qowiyyu celebration in Jatinom, they not only understand the history but also practice language skills through discussions, reflective writing, and digital content creation. This approach aligns with the concept of Content and Language Integrated Learning (CLIL), where language is learned through meaningful substantive content (Coyle, Hood, & Marsh, 2010). Thus, students gain two benefits simultaneously: language mastery and a deeper understanding of Islamic cultural heritage. Furthermore, the digital methods implemented by the Islamic Studies Project reflect both educational and adaptive characteristics. Educational because learning is directed at building communicative competence and cultural literacy; adaptive because these methods adapt to technological developments and the learning styles of the digital generation. For example, students are involved in producing reflective podcasts or video blogs that encourage creativity, collaboration, and digital literacy skills. In this way, the Islamic Studies Project contributes to the development of 21st-century competencies, which



include critical thinking, creativity, communication, and collaboration (Prensky, 2010). Furthermore, the implementation of digital education through this project also adopts the principles of participatory pedagogy. Learners are not merely recipients of knowledge but also content producers who convey their own understanding of Islamic tradition. This aligns with Paulo Freire's idea of liberating education, which places learners as active subjects in the learning process (Freire, 1998). Thus, the Islamic Studies Project serves not only as a language learning medium but also as a means of empowering more contextual Islamic literacy. Overall, the implementation of digital education through the Islamic Studies Project demonstrates that technology can be used to enrich learning, not replace it. The integration of creative media with Islamic historical and cultural content creates a meaningful, relevant, and effective learning experience. This model can serve as inspiration for designing digital-based language pedagogy that remains grounded in Islamic cultural and spiritual values. C. Educational and Adaptive Language Methods in Learning The development of language education today faces increasingly complex dynamics. Globalization, digital technology, and the diverse backgrounds of students demand learning methods that emphasize not only theoretical aspects but also address real-world needs. Within this framework, the concept of educative and adaptive language methods emerges as a new paradigm. Educative emphasizes that learning must be meaningful, building language skills while fostering critical, creative, and communicative attitudes. Adaptive emphasizes the importance of flexibility, namely how methods can adapt to changing times, technology, and the social conditions of students (Anderson, 2020). Educational language methods position language as an instrument for the formation of knowledge and culture, not merely a technical skill. Learning does not stop at mastering grammar or vocabulary, but rather focuses on how students can use language in real-life contexts. For example, in a communicative approach, students are invited to interact through everyday conversations, presentations, debates, or role playing simulations that bring learning closer to their lives (Brown, 2007). This model fosters awareness that language is a means of cross-cultural communication, so its use must be contextual, ethical, and relevant to social reality. On the other hand, adaptive language methods are crucial because today's students' learning environments are far more diverse than in the past. Adaptability means teachers are able



to change learning strategies and media according to students' needs, whether in terms of learning style, cultural background, or technological developments (Richards & Rodgers, 2014). For example, digital generation students are more receptive to learning materials through online applications, podcasts, or video lessons than through printed text alone. In this context, teachers are required to use technology as an integral part of their teaching methods. Through digital storytelling or project-based learning, students not only learn language passively but also produce creative content relevant to their own experiences (Thomas, 2000). While educational methods emphasize content and learning values, adaptive methods offer flexibility in delivery and strategy. The two are inseparable. A language learning method that is solely educational but not adaptive will feel rigid, struggle to keep up with changing times, and tend to bore students. Conversely, a method that is solely adaptive but lacks an educational basis will lose its direction, focusing more on entertainment than on achieving learning objectives. Therefore, synergy between the two is crucial: educational methods maintain the quality of the content, while adaptive methods ensure the relevance and acceptability of the learning (Prensky, 2010). An example of the synergy between educational and adaptive methods can be seen in the application of project-based learning. Language teachers can design assignments to create vlogs or podcasts, where students practice speaking the target language (educational) while simultaneously using technology relevant to their daily lives (adaptive). This type of activity not only trains language skills but also strengthens digital literacy, collaboration skills, and creativity. Furthermore, this type of learning aligns with the concept of student-centered learning, which positions students as active subjects constructing their own knowledge (Vygotsky, 1978). Besides being relevant to technological developments, educational and adaptive language methods are also crucial for addressing socio-cultural diversity in the classroom. Students often come from diverse backgrounds, whether in their native languages, traditions, or perspectives. Adaptive methods help teachers adapt learning to these differences, while educational methods ensure all students retain the same pedagogical values. Thus, language learning serves a dual purpose: teaching communicative competence while fostering a tolerant and appreciative attitude toward diversity. Ultimately, educational and adaptive language methods are not merely options, but urgent needs in language education in the



21st century. These methods address the challenges of a digital, pluralistic, and dynamic world, while maintaining the primary goal of education: developing individuals who are able to communicate effectively, think critically, and possess social awareness. By combining educational content with adaptive characteristics, language learning can move beyond the classroom to become a means of empowering individuals to face global realities.

#### **CONCLUSIONS**

The development of digital technology has presented significant opportunities in education, particularly in language learning. Creative media such as digital storytelling and podcasts provide new opportunities for learning processes that focus not only on linguistic aspects but also connect language to broader cultural contexts. Within this framework, the Islamic Studies Project serves as a concrete example of how digital innovation can be leveraged to deliver a more interactive, communicative, and contextual learning experience. The research results show that implementing the Islamic Studies Project through the integration of digital narratives and audio-visual media can improve participants' vocabulary, broaden their cultural horizons, and encourage active engagement in the learning process. In this way, language learning is no longer artificial but directly connected to the traditions, history, and social practices of Muslim communities. The success of the Islamic Studies Project lies in its ability to combine three key aspects: communicative language, engaging audiovisual presentations, and relevant historical narratives. This synergy makes learning more suited to the needs of the digital generation, which tends to prioritize visual and audio media in the learning process. Furthermore, this project not only impacts language acquisition but also serves as a means of cultural preservation. Documenting local traditions and Islamic history through digital media ensures that these legacies remain alive and accessible across generations. Thus, it can be concluded that the integration of digital storytelling and podcasts in the Islamic Studies Project not only presents pedagogical innovation but also builds a bridge between language learning, digital literacy, and the preservation of Islamic culture. This model has great potential for replication in other language learning, as long as the content is adapted to local cultural characteristics. This demonstrates that language education in the digital age can simultaneously serve as a means of cultural

empowerment, building historical awareness, and strengthening students' identities in facing global challenges.

#### REFERENCES

- Anderson, T. (2020). *Theories for learning with emerging technologies*. Athabasca University Press.
- Anhar, A. M., Ramadhani, A. P., & Putri, G. S. (2024). Digital technology: Integration in Indonesian language learning in the era of the industrial revolution 4.0. *JIIC: Jurnal Intelek Insan Cendikia*, 4, 277–283.
- Belay, B. S. (2022). Digital adaptation. *Haaretz*, 5(2003).
- Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Education.
- Chairunnisa, & Masyhuri, A. A. (2024). The digital revolution in Indonesian language learning: The impact of information technology developments. *Pedagogy:*Journal of Education and Research, 2(1). https://doi.org/10.56773/pjer.v2i1.42
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.
- Faaizah, N. (2023, June 6). 6 definitions of education according to experts, including Ki Hajar Dewantara and John Dewey. *Kompas.com*.

  <a href="https://www.kompas.com/pendidikan/">https://www.kompas.com/pendidikan/</a>
- Freire, P. (1998). *Pedagogy of freedom: Ethics, democracy, and civic courage*. Rowman & Littlefield.
- Fuad, A., Susant, L. R. R., Maharani, S. D., & Safitri, E. R. (2022). *Basic theories and concepts of education*.



- Habe, H., & Ahiruddin, A. (2017). National education system. *Ekombis Sains: Journal of Economics, Finance and Business*, 2(1), 39–45. https://doi.org/10.24967/ekombis.v2i1.48
- Jannah, T. M., Aisyah, R. N., Saputri, W. E., Sajida, & Parwiyanto, H. (2025). Debate on AI and coding integration in Indonesian education: Urgency, challenges, prospects. *Journal of Transformative Governance and Social Justice*, 3(1), 28– 40.
- Maunah, B., & Bintank. (2022). Education in various educational approaches and theories. *Scholar: Journal of Education and Learning*, 16(1), 40–53. https://doi.org/10.30957/cendekia.v16i1.717
- Mukhofifah, & Umi, A. (2022). *Application of digital literacy in improving student learning outcomes in SKI subjects at MAN 5 Kediri* (pp. 15–43).
- Najwa, S. P., & Marsofiyati. (2024). The influence of learning technology integration and educational effectiveness on the transformation of the educational paradigm in the digital era. *Creative Student Journal*, 3(1), 74–86.
- https://doi.org/10.59581/jmkwidyakarya.v3i1.4475
- Oktika, M. (2022). Digitalization plays an important role in the industrial era 4.0. In 2022 National Seminar NBM Arts (pp. 1–5).
- Prensky, M. (2010). *Teaching digital natives: Partnering for real learning*. Corwin Press.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Saputra, F. A. D. W. P., Yayuk, E., & Tinus, A. (2025). Challenges and success factors in digital classroom implementation. *Academia Open*, 10(1), 1–16.
- https://doi.org/10.21070/acopen.10.2025.11144

- Sihaloho, F. A. S., & Napitupulu, Z. (2024). The use of artificial intelligence in education in Indonesia: A literature review. *Journal of Technology and Education*, 9(1), 13–20.
- Suparyanto, & Rosad. (2020). Digitalization. *Journal of Social Sciences*, 5(3), 248–253.
- Thomas, J. W. (2000). *A review of research on project-based learning*. Autodesk Foundation.
- Ubaidah. (2022). Theories underlying learning with digital technology.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.