

SYNERGIES IN EDUCATION: INTEGRATING CHARACTER, LITERACY, AND TECHNOLOGY FOR ENHANCED OUTCOMES: CURRENT PERSPECTIVES FROM GLOBAL EDUCATION EXPERTS

Dede Gustian *¹

Universitas Sains Cut Nyak Dhien, Indonesia
dedelangsa2018@gmail.com

Marzuki

Universitas Kapuas, Indonesia
denmaszuki@gmail.com

Nukman

Institut Teknologi dan Kesehatan Aspirasi, Indonesia
nukman@aspirasi.ac.id

Yulian Purnama

UIN Saizu Purwokerto, Indonesia
yulianpurnama@uinsaizu.ac.id

Dayan Abdurrahman

Universitas Islam Kebangsaan Indonesia

Abstract

This literature review delves into the multifaceted transformation of education through the lens of character development, literacy promotion, and the strategic integration of technology. Drawing from the perspectives of global education experts, the study navigates the evolving landscape of education in Indonesia, highlighting challenges and opportunities within its decentralized system. The significance of character development is underscored, emphasizing its role in shaping well-rounded individuals capable of navigating a rapidly changing world. Exploring Literacy in the modern educational context, the review defines its broader scope, encompassing traditional and digital forms. Global initiatives to improve literacy rates and successful programs are examined, shedding light on effective strategies for fostering a reading culture and enhancing critical thinking skills. Technology integration is investigated as a transformative force, redefining teaching and learning experiences globally. The literature showcases initiatives and case studies that illustrate successful technology integration in education while addressing challenges and proposing solutions for maximizing benefits. The synthesis of these components reveals an intricate interplay between character development, Literacy, and technology. The interconnectedness of these elements forms the foundation for a holistic educational approach, preparing students both academically, ethically and technologically. Global perspectives on

¹ Correspondence author.

integrated approaches showcase exemplary educational systems, emphasizing the transformative potential of a comprehensive, student-centered education.

Keywords: Character development, Literacy promotion, educational technology, Global education experts, Holistic education, Transformative learning.

Introduction

The transformation of Indonesia's education landscape is highlighted by UNESCO (2020), which discusses global education challenges and inclusivity. Shaturaev (2021) provides insights into the financing and quality challenges of primary education in Indonesia. Glavič (2020) delves into identifying critical issues in education for sustainable development, emphasizing the need for a comprehensive approach. Fatahillah and Afadh (2022) contribute by addressing the dynamic nature of education in Indonesia, offering perspectives on the roadmap and challenges within the educational system.

Indonesia's evolving landscape of education is marked by its geographical and demographic complexity (UNESCO, 2020). Comprising a vast archipelago and a diverse population, the nation faces significant challenges in ensuring equitable and high-quality education for all its citizens. One of the distinctive features of the Indonesian education system is its decentralized structure, empowering regional governments (Shaturaev, 2021; Sitopu et al., 2024; Afni et al., 2024; Antika et al., 2024). However, this decentralization has resulted in variations in educational standards and infrastructure across different provinces. The disparities present a pressing concern for policymakers, educators, and stakeholders as they grapple with the need to address these issues and enhance the overall quality of education nationally.

Character development, Literacy, and technology are fundamental pillars in constructing a robust educational framework in Indonesia (Tubagus et al., 2023; Aslan & Shiong, 2023; Muharrom et al., 2023). These elements play a crucial role in fostering academic success and preparing students to navigate the complexities of a rapidly changing world. Character development, encompassing values, ethics, and social responsibility, becomes imperative in shaping individuals who can contribute meaningfully to society (Ryan & Bohlin, 1999; Nurhayati et al., 2023; Erwan et al., 2023)). In the Indonesian context, where diverse cultures coexist, character education promotes unity and understanding among the population.

Literacy, both in traditional and digital forms, holds a central position in the educational narrative. Reading, writing, and comprehending information are foundational for knowledge acquisition, critical thinking, and effective communication (Torras Calvo, 2017; Nurdiana et al., 2023; Sarmila et al., 2023). In a globalized world, where information is abundant and rapidly disseminated, Literacy becomes a key determinant of success. The challenges of promoting Literacy in Indonesia are nuanced,

given the linguistic diversity in the archipelago. The emphasis on multilingual education becomes crucial to addressing the varied linguistic needs of the population (Zein, 2017).

Integrating technology thoughtfully into the educational landscape presents opportunities to bridge gaps and enhance learning experiences for students in Indonesia. The modern workforce demands digital Literacy, and exposure to technology in education prepares students for the challenges of a technology-driven world (Dweikat, 2018; Sulastri et al., 2023; Haddar et al., 2023). However, technology integration comes with its own challenges, including access issues, the digital divide, and the need for teacher training (Bond, Zawacki-Richter, & Nichols, 2019). Addressing these challenges is vital to ensuring that technology contributes positively to the educational landscape rather than exacerbating existing disparities.

To navigate these challenges, policymakers, educators, and stakeholders in the Indonesian education system must collaborate on comprehensive strategies (Sari & Pranoto, 2021). Initiatives focusing on character development, literacy promotion, and thoughtful technology integration can contribute to a holistic educational experience. This involves addressing immediate concerns and envisioning a future-ready education system that equips students with the skills and values necessary for success in the evolving global landscape (Fatahillah & Afadh, 2022). Through a concerted effort, Indonesia has the potential to transform its education system and empower its citizens for the challenges and opportunities of the 21st century (Suradi, Nilawati, & Aryati, 2021).

This literature review's first purpose is to explore global education experts' current perspectives thoroughly. The field of education is dynamic and constantly evolving, and experts' insights provide a valuable lens through which we can understand the challenges and successes in character development, Literacy, and technology integration (Antoninus et al., 2020). Examining these perspectives offers a nuanced understanding of diverse approaches and strategies that have proven effective in different cultural and educational contexts globally. The cross-cultural viewpoints provide a rich tapestry of experiences, enabling us to glean insights into innovative practices that may be adaptable and beneficial within the unique framework of the Indonesian education system.

As we delve into the literature, the focus on character development becomes particularly significant. Global experts often contribute to the discourse on fostering values, ethics, and social responsibility in students (Davidson et al., 2007). Understanding how different educational systems address character development can offer valuable lessons for cultivating a sense of citizenship and shared values in the Indonesian context. By tapping into this global knowledge pool, policymakers and educators in Indonesia can gain inspiration for designing and implementing character education programs that resonate with the nation's diverse cultural fabric.

The second purpose is identifying key trends and insights in character development, literacy, and technology integration within the global educational landscape. This review aims to distill overarching trends shaping the discourse in these critical areas through a comprehensive analysis of the existing literature. Identifying these trends is crucial for policymakers and educators in Indonesia as they seek to align their strategies with the broader evolution of education worldwide (Sahlberg, 2023). This approach ensures that interventions and policies are both locally relevant and forward-looking, considering the anticipated future needs and challenges in the global educational arena.

In the context of Literacy, for example, global trends may shed light on innovative methods for promoting Literacy in diverse linguistic environments (Scannell, 2021). The review aims to uncover strategies that have successfully fostered reading habits, critical thinking skills, and effective communication on a global scale (Snyder et al., 2019). These insights can inform the development of literacy programs that are culturally sensitive and responsive to the linguistic diversity within Indonesia.

In conclusion, this literature review serves as a bridge between the global and the local, offering a comprehensive understanding of both the broader trends in education and the specific challenges and opportunities faced by the Indonesian education system. By emphasizing the crucial elements of character development, Literacy, and technology, the review aims to contribute meaningfully to the ongoing dialogue on shaping education systems that prepare students for a dynamic, interconnected world. The ultimate goal is to empower Indonesian students with the skills, values, and knowledge necessary for success in the 21st century.

Research Method

To initiate this literature review, an elaborate search strategy was formulated to identify, select, and analyze relevant scholarly works on character development, Literacy, and technology in education. Employing a comprehensive approach, prominent academic databases such as PubMed, ERIC, JSTOR, and Google Scholar were explored to access a diverse collection of articles, books, and reports (UNESCO, 2020; Shaturaev, 2021; Glavič, 2020; Fatahillah & Afadh, 2022). The search employed a strategic combination of keywords and phrases such as "character education," "literacy in education," "educational technology," "global education perspectives," and "21st-century skills" (Shaturaev, 2021; Torras Calvo, 2017; Dweikat, 2018; Reeves & Oh, 2017; Zein, 2017; Scannell, 2021).

In selecting literature, stringent criteria were established to ensure relevance to the chosen topics, recency, and credibility of the sources (UNESCO, 2020; Fenanlampir et al., 2019). Preference was given to works that directly addressed the interplay between character development, Literacy, and technology in the global education context (Sahlberg, 2023). The temporal aspect was considered, prioritizing recent

publications from the last 5-10 years to integrate the latest research and developments into the review (Snyder et al., 2019). Peer-reviewed articles, academic books, and reports from reputable educational institutions were prioritized to uphold the scholarly integrity of the review (Sahlberg, 2023).

Data extraction involved distilling key findings, methodologies utilized in primary studies, and expert opinions from the selected literature (Torras Calvo, 2017). A thematic coding approach was employed to categorize literature based on key themes such as character development, literacy initiatives, technology integration, and global perspectives (Sahlberg, 2023). The synthesis process encompassed a narrative overview that summarized key arguments, identified patterns, and delineated variations in global perspectives on character, Literacy, and technology in education (Sahlberg, 2023).

Quality assessment was integral to the methodology, involving a critical appraisal of the selected literature (Snyder et al., 2019). This evaluation encompassed considerations of research methodology, study design, and the overall credibility of the authors (Sahlberg, 2023). Works with robust research methods and theoretical frameworks were given precedence (Snyder et al., 2019). Potential biases in the literature were acknowledged, and a reflective stance was adopted to discern how these biases might impact the interpretation of results (Sahlberg, 2023).

The analysis and interpretation phase incorporated thematic analysis to identify recurring themes, trends, and patterns across the selected literature (Saldaña, 2021). Comparative analysis was employed to juxtapose the perspectives of different global experts, highlighting similarities and differences in their views on character development, Literacy, and technology in education (Sahlberg, 2023).

Ethical considerations were paramount throughout the review (Shamoo & Resnik, 2009). While ethical approval was not required, given the nature of a literature review, ethical considerations involved ensuring the proper citation of sources, avoiding plagiarism, and maintaining academic integrity (Shamoo & Resnik, 2009).

Recognizing the inherent limitations of a literature review, including potential gaps in the available literature, language biases, and the dynamic nature of educational trends, the review remains cognizant of these constraints (Sahlberg, 2023). Through this comprehensive and ethical methodology, the literature review aspires to provide a nuanced and critical synthesis of current perspectives from global education experts on the transformative roles of character, Literacy, and technology in education (Sahlberg, 2023).

This table outlines the meticulous methodology for a comprehensive literature review on character development, Literacy, and technology in education. Emphasizing strategic search criteria, quality assessment, and ethical considerations, the methodology aimed to provide a nuanced synthesis of global perspectives from the last 5-10 years, acknowledging inherent limitations in the available literature.

Table 2: Methodological Framework for Literature Review on Character Development, Literacy, and Technology in Education

| Methodology Component | Details |
|--------------------------------------|---|
| Search Strategy | Formulated elaborate strategy using databases (PubMed, ERIC, JSTOR, Google Scholar) and strategic keywords. |
| Literature Selection | Stringent criteria for relevance, recency, and credibility. Prioritized recent publications (last 5-10 years) from reputable sources. |
| Data Extraction | Distilled key findings and methodologies using thematic coding. |
| Synthesis Process | Employed thematic analysis to synthesize key arguments and variations. Generated a narrative overview for comprehensive synthesis. |
| Quality Assessment | Critically appraised literature, prioritizing works with robust methods. Acknowledged biases and adopted a reflective stance. |
| Analysis and Interpretation | Thematic and comparative analysis to identify recurring themes and perspectives. |
| Ethical Considerations | Ensured proper citation, avoided plagiarism and maintained academic integrity. |
| Acknowledgment of Limitations | Recognized inherent limitations, including potential gaps and biases. Remained cognizant of constraints for a nuanced synthesis. |

Created, 2023

Findings

Character Development in Education

Character development in education involves intentionally cultivating virtues, values, and ethical principles in individuals within an educational context (Snyder et al., 2019; Elias & Arnold, 2006). It is the process through which students acquire and internalize traits such as integrity, responsibility, empathy, and resilience (Elias & Arnold, 2006). The significance of character development lies in its capacity to shape well-rounded individuals capable of navigating the complexities of life beyond academic achievements (Sahlberg, 2023). Beyond the transmission of knowledge, education plays a pivotal role in molding students' character and contributing to the holistic development of their personalities (Sahlberg, 2023).

The global landscape witnesses many character education programs to instill values and virtues in students. These initiatives foster a sense of responsibility, social awareness, and ethical decision-making. By providing an overview of these global initiatives, this section aims to highlight diverse approaches to character education.

Additionally, case studies of successful character development programs will be examined to illustrate practical applications and outcomes. Analyzing these programs offers insights into practical strategies for nurturing character traits and fostering positive behaviors among students (Sahlberg, 2023).

Implementing character education programs has. Addressing these obstacles is crucial for successfully integrating character development into educational settings. Common challenges include stakeholder resistance, lack of standardized frameworks, and varying cultural interpretations of virtues. This section delves into these challenges and proposes strategies to overcome them. Moreover, it identifies opportunities within educational settings to enhance character development, emphasizing the symbiotic relationship between academic achievement and the cultivation of character traits (Sahlberg, 2023).

Literacy in Education

Literacy in the modern educational context extends beyond the traditional notion of reading and writing. It encompasses comprehending, critically analyzing, and effectively communicating information in various forms, including digital media. The importance of literacy skills cannot be overstated, as they are foundational for academic success and lifelong learning. In today's interconnected and information-rich world, literacy skills are the cornerstone for intellectual growth and active social participation (UNESCO, 2017).

Globally, concerted efforts are underway to improve literacy rates and enhance student literacy skills. This section provides an overview of these initiatives, ranging from international campaigns to local interventions. Successful literacy programs that have positively impacted education will be examined. Understanding these initiatives sheds light on effective strategies for promoting Literacy and improving overall educational outcomes (UNESCO, 2017).

Despite ongoing efforts, promoting Literacy faces challenges such as resource constraints, linguistic diversity, and changing media landscapes. Identifying these challenges is crucial for developing targeted strategies. This section explores the obstacles in promoting Literacy and proposes strategies to address literacy gaps. It also emphasizes the importance of fostering a reading culture within educational institutions, encouraging students to engage with various forms of literature to enhance their literacy skills (UNESCO, 2017).

Technology Integration in Education

Technology has become a transformative force in the modern educational landscape, redefining how students learn and teachers instruct. Its role is not merely that of a tool but an enabler of dynamic and interactive educational experiences. Technology is vital for fostering engagement, personalized learning, and preparing

students for the evolving demands of the 21st-century workforce. The importance of technology in education lies in its capacity to enhance the accessibility of information, facilitate collaboration, and provide innovative methods for teaching and learning (Prensky, 2016).

Around the world, various technology-driven education initiatives are reshaping traditional learning environments. This section provides an overview of these initiatives, ranging from integrating smart classrooms and online learning platforms to implementing virtual reality and artificial intelligence in educational settings. Case studies will be examined to showcase instances where technology integration has been particularly successful, leading to improved student outcomes, increased engagement, and enhanced teacher effectiveness (Prensky, 2016).

Adopting and implementing educational technology is challenging. Identifying these challenges is crucial for creating effective strategies that mitigate obstacles to successful integration. Common challenges include accessibility issues, the digital divide, and resistance to change. This section delves into these challenges and proposes solutions and best practices for overcoming them (Prensky, 2016). Strategies for providing equitable access to technology, offering adequate training for educators, and addressing concerns about the impact of technology on student well-being will be explored (Prensky, 2016).

The intersection of Character, Literacy, and Technology in Education

Character development, Literacy, and technology are not isolated components within education; they form an interconnected triad that contributes to holistic learning experiences. Examining the symbiotic relationship between these elements reveals that technology can be a powerful tool for cultivating character traits and enhancing literacy skills. For instance, educational technology platforms can be designed to promote digital citizenship, ethical use of information, and collaboration, aligning with character education goals (Koehler et al., 2013).

This section showcases examples of educational systems worldwide that have successfully integrated character development, Literacy, and technology. By highlighting outcomes and benefits, it aims to illustrate the transformative potential of an integrated approach. For instance, schools may leverage technology to provide personalized literacy interventions that improve academic outcomes and reinforce positive character traits such as perseverance and self-discipline. The global perspective on integrated approaches emphasizes the synergies that arise when character, Literacy, and technology are thoughtfully woven into the education fabric (Koehler et al., 2013).

In conclusion, integrating technology in education is a multifaceted phenomenon with profound implications for teaching, learning, and student development. Understanding its role, exploring global initiatives, and addressing challenges in its implementation are essential steps in harnessing the full potential of

educational technology. Moreover, recognizing the interconnectedness of character development, Literacy, and technology paves the way for a holistic educational approach that prepares students both academically, ethically and technologically for the complexities of the modern world. This integrated perspective is a guiding principle for educators, policymakers, and stakeholders seeking to redefine and enhance the educational experience.

This table provides a concise overview of key aspects of education—Character Development, Literacy, and Technology Integration. Findings, descriptions, implementations, and evidence from reputable sources are presented for each aspect. Highlighting global initiatives, successful programs, and challenges, the table offers valuable insights for policymakers and educators aiming to enhance the holistic educational experience by understanding the interconnected dynamics of character, Literacy, and technology in contemporary learning environments.

Table 2: Interplay of Character Development, Literacy, and Technology Integration in Education

| Aspect | Findings | Description | Implementation | Evidence |
|------------------------------|--|--|--|---|
| Character Development | - Deliberate process focusing on virtues (Snyder et al., 2019). | - Cultivates traits like integrity and empathy (Elias & Arnold, 2006). | - Global character education programs (Sahlberg, 2023). | - Successful case studies demonstrate outcomes (Sahlberg, 2023). |
| Literacy in Education | - Beyond reading and writing, includes analysis (UNESCO, 2017). | - Essential for academic success (UNESCO, 2017). | - Global efforts to improve literacy rates (UNESCO, 2017). | - Successful programs show improved outcomes (UNESCO, 2017). |
| Tech Integration | - Technology transforms learning and engagement (Prensky, 2016). | - Enabler of dynamic educational experiences (Prensky, 2016). | - Smart classrooms to virtual reality globally (Prensky, 2016). | - Case studies show improved outcomes and engagement (Prensky, 2016). |
| Intersection | - Interconnected elements contribute to learning (Koehler et al., 2013). | - Technology enhances character and Literacy (Koehler et al., 2013). | - Global integration examples; technology for literacy interventions (Koehler et al., 2013). | - Outcomes illustrate synergies in character and Literacy (Koehler et al., 2013). |

| Aspect | Findings | Description | Implementation | Evidence |
|-------------------|--|---|---|---|
| Conclusion | - Tech in education has profound implications (Prensky, 2016). | - Recognizing interconnectedness is essential (Koehler et al., 2013). | - Policymakers should adopt an integrated perspective (Sahlberg, 2023). | - Perspective enhances the educational experience (Sahlberg, 2023). |

Created, 2023

Discussion

A Foundation for Holistic Growth

The investigation into character development in education highlights its pivotal role in shaping well-rounded individuals. Beyond the transmission of knowledge, character development emerges as a foundational aspect contributing to the holistic growth of students. Traits such as integrity, empathy, and resilience extend beyond academic success, forming the basis for ethical decision-making and social responsibility. The literature suggests that character education is integral to nurturing individuals who contribute meaningfully to society, emphasizing its role beyond a mere addendum to academic pursuits (Elias & Arnold, 2006; Ryan & Bohlin, 1999).

Global initiatives promoting character education demonstrate a commitment to instilling values that transcend cultural boundaries. Case studies provide practical insights into successful strategies for character development programs. Despite challenges, including cultural variations and resistance, the literature underscores the need to address these obstacles fully to realize character development's potential in educational settings. Identifying opportunities for enhancement aligns with the broader goal of creating learning environments that foster academic excellence and the development of virtuous individuals (Manca, 2018; Scannell, 2021).

Beyond Reading and Writing

In the modern educational context, Literacy extends far beyond conventional notions, encompassing the ability to navigate and critically engage with information in various forms. Literacy skills are foundational for academic success and crucial for lifelong learning. Global efforts to improve literacy rates are highlighted, from international campaigns to localized programs. Successful literacy programs, evidenced by case studies, demonstrate the positive impact of targeted interventions on overall education outcomes (Unesco, 2017; Darling-Hammond, 2017).

However, challenges persist in promoting Literacy, including linguistic diversity and evolving media landscapes. Strategies to address these challenges emphasize a multifaceted approach, incorporating traditional and digital literacy skills. The call to foster a reading culture aligns with the broader shift towards comprehensive literacy

education encompassing traditional, digital, and multimedia Literacy (Huberman, 2014; Saldaña, 2021).

Catalyst for Educational Transformation

As a transformative force, technology has reshaped the educational landscape, catalyzing dynamic and interactive learning experiences. The literature underscores its importance in enhancing accessibility, facilitating collaboration, and preparing students for a technology-driven world. Global initiatives and case studies showcase the potential of technology to revolutionize traditional learning environments (Prensky, 2016; Koehler et al., 2013).

Challenges in adopting and implementing educational technology persist, including the digital divide, resistance to change, and concerns about its impact on student well-being. Strategies proposed in the literature offer a roadmap for overcoming these challenges, emphasizing equitable access, teacher training, and a balanced approach to technology integration (Ramsey, 2023; Gallagher et al., 2021).

A Holistic Educational Approach

The synthesis reveals the intricate interplay between character development, Literacy, and technology in education. The symbiotic relationship becomes apparent, with technology serving as a tool for character cultivation and literacy enhancement. The literature advocates for an integrated approach recognizing the interconnectedness of these components, emphasizing their collective impact on holistic education (Schnitzler, 2020; Gusenbauer & Haddaway, 2020). Global perspectives on integrated approaches showcase exemplary educational systems successfully weaving character development, Literacy, and technology into the fabric of education. These systems emphasize outcomes and benefits beyond academic achievements, highlighting the transformative potential of a holistic educational approach (Davidson et al., 2007; Unesco, 2017).

In conclusion, the findings underscore the necessity of moving beyond siloed approaches to education. Character development, Literacy, and technology integration converge to create a comprehensive educational framework. The synthesis of global perspectives and case studies emphasizes that educators, policymakers, and stakeholders must embrace an integrated approach that recognizes the interconnected nature of character, Literacy, and technology. This holistic perspective prepares students for academic success and equips them with ethical values, critical thinking skills, and technological proficiency needed to thrive in the complex landscape of the 21st century. The call for transformative education resonates through these findings, encouraging a paradigm shift towards a more holistic and student-centered approach.

Conclusion

The comprehensive exploration of character development, literacy, and technology integration in education has yielded significant insights from the literature. Synthesizing major themes reveals the intricate interplay between these elements, emphasizing their collective impact on holistic education. Character development emerges as a foundational pillar, shaping well-rounded individuals with ethical values and social responsibility. The expanded definition of Literacy encompasses traditional reading and writing skills and digital and multimedia Literacy, highlighting its crucial role in academic success and lifelong learning. As a transformative force, technology integration stands out as a catalyst for dynamic and interactive learning experiences, reshaping traditional educational paradigms.

A key finding is the recognition of the interconnectedness of character, Literacy, and technology. These components are not isolated but converge to create a holistic educational framework. The literature underscores the need for a balanced approach that integrates these elements, preparing students both academically, ethically and technologically for the challenges of the 21st century.

Identifying gaps in the current literature presents opportunities for future research and practice. While the literature provides rich insights, certain areas still need to be explored. Further research is needed to delve into the nuanced cultural considerations in character development, recognizing that values and virtues may vary across diverse educational settings. Additionally, exploring the impact of technology on character formation and ethical decision-making represents a promising avenue for future investigation.

In terms of Literacy, addressing the challenges posed by evolving media landscapes and linguistic diversity requires ongoing research. Further exploration of effective strategies for fostering a culture of reading and enhancing digital literacy skills is crucial, especially given the increasing importance of these skills in the modern world.

The implications for educational practices are significant. The call for a balanced approach encourages educators to integrate character development, Literacy, and technology into their teaching methodologies. Professional development initiatives should prioritize training educators to navigate the challenges and opportunities presented by these integrated components, ensuring they can create engaging and effective learning environments.

In conclusion, the literature synthesis reveals a compelling narrative of the interconnectedness of character, Literacy, and technology in education. The implications for future research and practice underscore the need for a holistic approach that addresses gaps in the current understanding and guides educators, policymakers, and stakeholders toward transformative educational practices. As we move forward, embracing this integrated perspective promises to pave the way for a more comprehensive, student-centered, and future-ready educational landscape.

Acknowledgment

We express our heartfelt gratitude to the authors, researchers, and institutions whose scholarly works and contributions formed the foundation of this literature review. Their insights have been invaluable in shaping our understanding of character development, literacy, and technology integration in education. We also extend our appreciation to the educational community, whose dedication fuels the ongoing discourse on transformative practices in global education.

References

- Afni, T. N. A. N., Aslan, A., & Astaman, A. (2024). PROBLEMATIKA PEMBELAJARAN FIQIH DI KELAS IV MIS DARUL IHSAN SEPINGGAN PASCA KEBAKARAN TAHUN PELAJARAN 2022/2023. *Lunggu Journal*, 2(1), Article 1.
- Antika, M., Aslan, & Karlina, E. M. (2024). PENERAPAN METODE PEMBIASAAN DALAM MENINGKATKAN KEMANDIRIAN PADA ANAK KELOMPOK B1 DI TKIT YA BUNAYYA SAMBAS TAHUN PELAJARAN 2022-2023. *Samawa (Sakinah, Mawaddah Warahmah)*, 7(1), Article 1.
- Antoninis, M., April, D., Barakat, B., Bella, N., D'Addio, A. C., Eck, M., ... & Zekrya, L. (2020). All means all: An introduction to the 2020 Global Education Monitoring Report on inclusion. *Prospects*, 49, 103-109.
- Aslan, A., & Shiong, P. K. (2023). Learning in the Digital Age Full of Hedonistic Cultural Values Among Elementary School Students. *Bulletin of Pedagogical Research*, 3(2), 94. <https://doi.org/10.51278/bpr.v3i2.515>
- Bond, M., Zawacki-Richter, O., & Nichols, M. (2019). Revisiting five decades of educational technology research: A content and authorship analysis of the *British Journal of Educational Technology*. *British journal of educational technology*, 50(1), 12-63.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European journal of teacher education*, 40(3), 291-309.
- Davidson, M., Lickona, T., & Khmelkov, V. (2007). Intelligent and good schools: A paradigm shift for character education. *Education Week*, 27(12), 31-40.
- Dweikat, D. K. A. J. (2018). .. Considerations on Educational Technology Integration: The Best of JRTE. Edited by Lynne Schrum. International Society for Technology in Education (ISTE), 2011. Pp. xi+ 314.
- Elias, M. J., & Arnold, H. (Eds.). (2006). *The educator's guide to emotional intelligence and academic achievement: Social-emotional learning in the classroom*. Corwin Press.
- Erwan, E., Aslan, A., & Asyura, M. (2023). INTERNALISASI BUDAYA RELIGIUS OLEH GURU AKIDAH AKHLAK UNTUK MENUMBUHKAN SIKAP AKHLAK MULIA DI MIS BINA DHARMA PARIT RABU. *JURNAL PENDIDIKAN DAN KEGURUAN*, 1(6), Article 6.
- Fatahillah, M., & Afadh, M. (2022). The Dynamic Education and the Problems of Roadmap Education in Indonesia. *Bulletin of Pedagogical Research*, 2(1), 47-52.

- Fenanlampir, A., Batlolona, J. R., & Imelda, I. (2019). The struggle of Indonesian students in the context of TIMSS and PISA has not ended. *International Journal of Civil Engineering and Technology*, 10(2), 393-406.
- Glavič, P. (2020). Identifying critical issues of education for sustainable development. *Sustainability*, 12(16), 6500.
- Gusenbauer, M., & Haddaway, N. R. (2020). Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Research synthesis methods*, 11(2), 181-217.
- Haddar, G. A., Haerudin, H., Riyanto, A., Syakhrani, A. W., & Aslan, A. (2023). THE REVOLUTION OF ISLAMIC EDUCATION THOUGHT IN THE ERA OF SOCIETY 5.0: CORRECTIONS AND ANALYSIS OF STUDIES IN ISLAMIC HIGHER EDUCATION INSTITUTIONS IN SOUTH KALIMANTAN. *International Journal of Teaching and Learning*, 1(4), Article 4.
- Huberman, A. (2014). *Qualitative data analysis a methods sourcebook*.
- Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *Journal of Education*, 193(3), 13-19.
- Manca, S. (2018). ResearchGate and Academia. Eduas networked socio-technical systems for scholarly communication: A literature review. *Research in Learning Technology*, 26.
- Muharrom, M., Aslan, A., & Jaelani, J. (2023). IMPLEMENTASI KURIKULUM MERDEKA BELAJAR PADA PEMBELAJARAN PENDIDIKAN AGAMA ISLAM DI SMK PUSAT KEUNGGULAN SMK MUHAMMADIYAH SINTANG. *Jurnal Ilmu Pendidikan Dan Kearifan Lokal*, 3(1), Article 1.
- Nurdiana, R., Effendi, M. N., Ningsih, K. P., Abda, M. I., & Aslan, A. (2023). COLLABORATIVE PARTNERSHIPS FOR DIGITAL EDUCATION TO IMPROVE STUDENTS' LEARNING ACHIEVEMENT AT THE INSTITUTE OF ISLAMIC RELIGION OF SULTAN MUHAMMAD SYAFIUDDIN SAMBAS, INDONESIA. *International Journal of Teaching and Learning*, 1(1), Article 1.
- Nurhayati, N., Aslan, A., & Susilawati, S. (2023). PENGGUNAAN TEKNOLOGI GADGET SEBAGAI MEDIA PEMBELAJARAN PADA ANAK USIA DINI DI RAUDHATUL ATFHAL AL-IKHLAS KOTA SINGKAWANG. *JIP: Jurnal Ilmu Pendidikan*, 1(3), Article 3.
- Prensky, M. (2016). *Education to better their world: Unleashing the power of 21st-century kids*. Teachers College Press.
- Reeves, T. C., & Oh, E. G. (2017). The goals and methods of educational technology research over a quarter century (1989–2014). *Educational Technology Research and Development*, 65, 325-339.
- Ryan, K., & Bohlin, K. E. (1999). *Building character in schools: Practical ways to bring moral instruction to life*. Jossey-Bass Inc., Publishers, 350 Sansome St., San Francisco, CA 94104.
- Sahlberg, P. (2023). Trends in global education reform since the 1990s: Looking for the right way. *International journal of educational development*, 98, 102748.
- Saldaña, J. (2021). The coding manual for qualitative researchers. *The coding manual for qualitative researchers*, 1-440.

- Sari, K., & Pranoto, B. E. (2021). Representation of Government Concerning the Draft of Criminal Code in The Jakarta Post: A Critical Discourse Analysis. *Parole: Journal of Linguistics and Education*, 11(2), 98-113.
- Sarmila, U., Aslan, A., & Astaman, A. (2023). THE ROLE OF PARENTS TOWARDS YOUTUBE USERS IN BUILDING CHILDREN'S RELIGIOUS BEHAVIOR IN KUALA PANGKALAN KERAMAT VILLAGE. *Archipelago Journal of Southeast Asia Islamic Studies (AJSAIS)*, 1(2), Article 2.
- Scannell, E. (2021). Cracking the Code: Early-Reading Indicators, Text Characteristics and The Lexile Framework for Reading in Primary and Post-Primary Schools in Ireland. In *LEARN* (p. 35).
- Schnitzler, T. (2020). Success factors of transformative learning: Putting theory into practice. *Reflective Practice*, 21(6), 834-843.
- Shamoo, A. E., & Resnik, D. B. (2009). *Responsible conduct of research*. Oxford University Press.
- Shaturaev, J. (2021). Education in Indonesia: Financing, Quality Challenges and Academic Results in Primary Education. *Архив научных исследований*.
- Sitopu, J. W., Khairani, M., Roza, M., Judijanto, L., & Aslan, A. (2024). THE IMPORTANCE OF INTEGRATING MATHEMATICAL LITERACY IN THE PRIMARY EDUCATION CURRICULUM: A LITERATURE REVIEW. *International Journal of Teaching and Learning*, 2(1), Article 1.
- Snyder, T. D., De Brey, C., & Dillow, S. A. (2019). Digest of Education Statistics 2017, NCES 2018-070. *National Center for Education Statistics*.
- Sulastri, S., Aslan, A., & Rathomi, A. (2023). STRATEGI GURU PENDIDIKAN AGAMA ISLAM DALAM PENYAMPAIAN MATERI PADA ANAK TUNAGRAHITA DI SEKOLAH LUAR BIASA NEGERI SAMBAS TAHUN PELAJARAN 2022/2023. *Lunggu Journal: Literasi Unggulan Ilmiah Multidisipliner*, 1(4), Article 4.
- Suradi, A., Nilawati, N., & Aryati, A. (2021). The Islamic Education Through Scientific Approach: Learning and Character Building on Transmigration Territories Elementary School. *International Journal of Asian Education*, 2(2), 256-266.
- Torras Calvo, M. C. (2017). Global Perspectives on Information Literacy: Chapter L. *Global Perspectives on Information Literacy. Fostering a Dialogue for International Understanding*.
- Tubagus, M., Haerudin, H., Fathurohman, A., Adiyono, A., & Aslan, A. (2023). THE IMPACT OF TECHNOLOGY ON ISLAMIC PESANTREN EDUCATION AND THE LEARNING OUTCOMES OF SANTRI: NEW TRENDS AND POSSIBILITIES. *Indonesian Journal of Education (INJOE)*, 3(3), Article 3.
- Unesco, E. S. (2017). Reading the past, writing the future: Fifty years of promoting Literacy.
- Zein, M. S. (2017). Elementary English education in Indonesia: Policy developments, current practices, and prospects: How has Indonesia coped with the demand for teaching English in schools? *English Today*, 33(1), 53-59.