PARENT AND TEACHER CHALLENGES IN NAVIGATING THE DIGITAL ERA

Trisnawaty[1*], Fatimah HS[2], Syarifuddin Ondeng[3], Syahruddin Usman[4]

Universitas Islam Negeri Alauddin Makassar, Indonesia[1.2.3,4]

*Corresponding Author: trisna.waty@uin-alauddin.ac.id

ABSTRACT

The rapid advancement of digital technology in the era of Industrial Revolution 4.0 and Society 5.0 has fundamentally transformed the way families and schools' function in educating children. Parents and teachers are increasingly confronted with complex challenges in guiding children amidst the influx of information, digital content, and internet-based learning. This article aims to analyse the roles of parents and teachers in responding to digital challenges, particularly in the context of Islamic education. Employing a qualitative approach through library research, the study synthesizes findings from academic literature, national surveys, and recent statistical data (2015–2024). The discussion is framed by Bronfenbrenner's Ecological Systems Theory and the Islamic framework of Maqāṣid al-Sharīʿah. Findings indicate a significant gap in digital literacy among parents and teachers, limited institutional readiness for digital pedagogy, and increasing exposure of children to harmful digital content. The article argues that current research often isolates the roles of parents and teachers, overlooking their synergistic potential in shaping children's character through a values-based framework. As a novelty, this study proposes a four-pillar tarbiyah model—parents, teachers, community, and the state—rooted in Islamic principles to promote digital ethics, character education, and spiritual development. This integrative approach is expected to serve as a practical and conceptual guide in constructing a holistic digital education ecosystem that aligns with Islamic values.

Keywords: Bronfenbrenner, Character Education, Digital Parenting, Islamic Education, Maqāṣid al-Shariʿah, Society 5.0, Teacher Competence

INTRODUCTION

The Fourth Industrial Revolution has brought about major transformations in human life through the integration of technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), big data, and robotics. These changes have extended into the realms of education and family life, affecting patterns of interaction, learning, and work (Rico, Sari, & Nugroho, 2023). In response to the social impacts of Industry 4.0, Japan introduced the concept of *Society 5.0*, a human-centered society in which technology is utilized as a means to achieve broader social well-being (Wijoyo, 2020).

Within the family environment, digitalization has altered the dynamics of communication. Devices such as smartphones and tablets have become a part of children's daily lives, posing new challenges for parents in guiding their children to use technology responsibly and healthily (Daniswara & Faristiana, 2023). Meanwhile, in the education sector, the integration of technology has become inevitable. The COVID-19 pandemic accelerated the adoption of online learning, yet not all teachers are adequately prepared pedagogically or technologically. Furthermore, teachers face significant challenges in managing digital education. Only 38% of teachers reported feeling confident in effectively utilizing digital learning platforms (Balitbang Kemendikbudristek, 2021). Other issues include difficulties in using Learning Management Systems (LMS), designing authentic assessments, and maintaining students' digital ethics in virtual classrooms (Fauzan, 2022). Infrastructural inequalities between regions have further widened the gap in education quality.

The high rate of internet penetration in Indonesia exacerbates these challenges. According to APJII (2024), 79.5% of Indonesia's population are internet users, with over 67% being active social media users (We Are Social & Hootsuite, 2023). UNICEF (2021) reports that over 60% of children aged 10–17 use the internet daily, and most of them do so without adequate parental supervision. Young people aged 13–24 constitute a dominant group of internet users (BPS, 2023), highlighting the extent of digital exposure among youth.

Children and adolescents use the internet not only for educational purposes but also for entertainment and social interaction. GoodStats (2025) notes that more than 90% of students aged 5–24 use the internet for entertainment, while nearly 68% access social media. This phenomenon increases the risk of exposure to negative content such as violence, pornography, hate speech, and hoaxes. A study by the Ministry of Women's

Empowerment and Child Protection (KPPPA, 2022) found that 1 in 4 Indonesian children had been exposed to pornographic content accidentally.

In addition, gadget addiction has become a critical issue. A survey by the Indonesian Child Protection Commission (Komnas Perlindungan Anak, 2022) revealed that 34% of children in major cities experience symptoms of addiction such as aggression when screen time is limited, sleep disorders, and declining academic performance. Instead of supporting learning, technology can hinder children's development if not supervised wisely.

In the context of Islamic education, digital-era challenges go beyond technical aspects and extend into issues of values and spirituality. The flow of liberal and consumerist information often contradicts Islamic principles (Kamali, 2019; Yusuf & Rahim, 2022). Islamic education is not only about knowledge transmission but also about instilling character and tauḥid based values. Therefore, both parents and teachers are required to be adaptive to technological advancements while remaining grounded in Islamic values.

Collaboration between parents and teachers becomes crucial in shaping children's character. In Islam, educating children is a collective trust. This is emphasized in the Qur'anic verse QS. At-Tahrim [66]:6, which calls on believers to safeguard themselves and their families from harmful influences, including those from digital exposure. Teachers, as *murabbi* (spiritual mentors), must be equipped with digital literacy and contextual pedagogical strategies to engage students emotionally and spiritually. Meanwhile, parents must evolve into *digital parents*—not merely monitoring their children's activity but also becoming active and communicative companions.

As a conceptual approach, *Maqāṣid al-Sharīʿah* can be applied as an ethical framework for navigating the digital era. Its five foundational objectives—protection of religion (*ḥifẓ al-din*), life (*ḥifẓ al-nafs*), intellect (*ḥifẓ al-ʿaql*), progeny (*ḥifẓ al-nasl*), and property (*ḥifẓ al-mal*) can be actualized in digital contexts: from safeguarding against un-Islamic content, ensuring safety from online exploitation, preventing digital addiction, to protecting personal data (Kamali, 2019).

Thus, the digital challenge is not merely technological, but one of values, character, and collaboration between home and school. This article seeks to explore the role of parents and teachers in cultivating an Islamic generation in the digital era.

The urgency of this study lies in the pressing need to build synergy between parents and teachers in shaping children's character amidst a digital wave that is increasingly liberal and consumerist. While technology offers opportunities for advancement, it also

presents risks of deviation if not guided by value-based frameworks. This calls for a new approach that is not only technical but also normative and ethical.

Nevertheless, previous studies have tended to isolate the roles of parents and teachers in addressing digitalization. Research on digital parenting mostly focuses on technical supervision (Livingstone & Helsper, 2017), while studies on digital pedagogy emphasize the integration of ICT into school curricula (Koehler & Mishra, 2009; Mishra, 2020). Few studies have examined how both roles can be synergized within an Islamic values framework and character education. This reveals a research gap concerning ecosystem-based, integrative, and value-oriented approaches to digital challenges.

Therefore, this article offers a scholarly novelty by integrating two theoretical frameworks: Bronfenbrenner's Ecological Systems Theory, which explains the interactive dynamics between children, parents, and teachers within interconnected systems, and *Maqaṣid al-Shariʿah* as a value-based framework to guide, regulate, and direct digital technology use in line with Islamic principles. This approach is expected to contribute both conceptually and practically to the development of an adaptive and principled model of Islamic education in the digital age.

RESEARCH METHOD

This study adopts a qualitative approach using library research methods. The primary data sources include scholarly literature such as academic books, peer-reviewed journal articles (DOI-indexed), national survey reports (APJII, BPS, KPPPA), and international documents from UNICEF, We Are Social, and Hootsuite relevant to digitalization, Islamic education, and youth development.

Data were analyzed using content analysis techniques, which involved several stages: (1) identifying central themes across the literature; (2) classifying relevant theoretical frameworks, including Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979), the TPACK model (Koehler & Mishra, 2009), and Maqāṣid al-Sharīʿah (Kamali, 2019); and (3) synthesizing the relationship between the roles of parents, teachers, and digital environments in character development. Data validity was maintained through source triangulation and logical consistency across references.

This methodological approach was chosen for its ability to explore the complexity of digital-era education from normative (Islamic values), theoretical (ecological and maqāṣid-based ethics), and contextual (up-to-date data) perspectives. It also allowed the authors to develop a conceptual analysis and propose a value-based alternative model for

addressing digital age educational challenges.

FINDINGS AND DISCUSSION

To clarify the position and contribution of this article to existing studies, the author has compiled a table comparing previous studies that summarizes the main focus, theoretical framework, and weaknesses or gaps of several relevant studies. This table aims to show that an integrative approach based on Islamic values and parent-teacher collaboration is still rarely studied in depth.

**Table 1.** Comparison of Previous Research and Research Gaps

Author(s)	Research Focus	Theoretical Framework	Gap/Limitation
Livingstone & Helsper (2017)	Technical aspects of digital parenting	Digital Parenting	Lacks emphasis on spiritual and moral aspects
Koehler & Mishra (2009)	Integration of ICT in education curriculum	TPACK Model	Ignores the role of families in digital education
Mishra (2020)	Digital pedagogy and TPACK framework	Digital Pedagogy	Does not address character and moral dimensions
This Article (Trisnawaty & Fatimah, 2025)	Synergy between parents and teachers based on Islamic values	Bronfenbrenner's Ecological Theory + Maqāṣid al-Sharīʿah	Addresses the gap through a collaborative, Islam-based approach

Source: Adapted and synthesized from various studies by the author (2025)

Table 1 shows that most previous studies, such as those conducted by Livingstone & Helsper (2017), focused more on the technical aspects of digital monitoring by parents without touching on spiritual aspects or moral values. Meanwhile, Mishra's (2020) study and the TPACK model (Koehler & Mishra, 2009) focus on the integration of technology into the curriculum and teacher pedagogy, but tend to overlook the role of the home (parents) and the normative dimensions of Islamic education. This article addresses this gap by synergizing the roles of parents and teachers within a more holistic Islamic education ecosystem approach.

To strengthen the conceptual novelty of this article, the author also developed an integrative model of Islamic education in the digital age, combining Bronfenbrenner's Ecological Theory and the Maqāṣid al-Sharīʿah value framework. This model is visualized in the following conceptual diagram.

Figure 1. An Integrative Model of Value-Based Islamic Education in the Digital Age
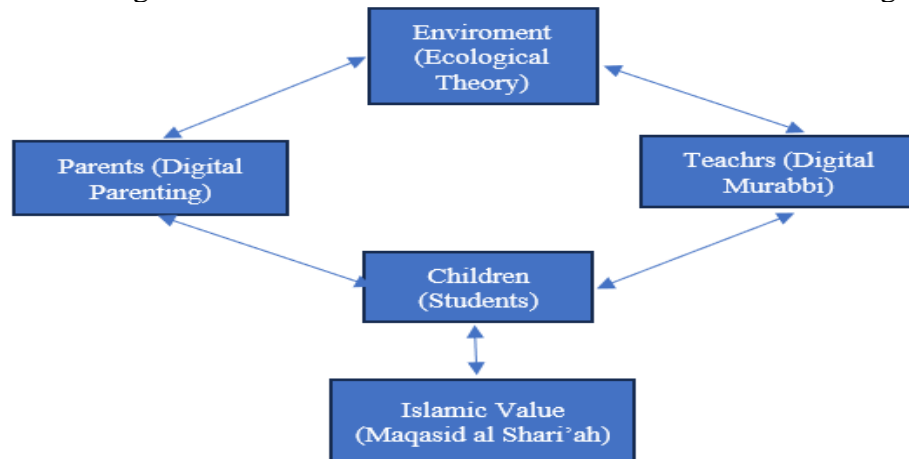
Source: Developed by the author based on Bronfenbrenner's Theory and Maqāṣid al-Sharīʿah (2025)

The image illustrates that child, as subjects of education, are at the centre of an interdependent system consisting of their families (parents), schools (teachers), and the wider social environment. Islamic values serve as the moral foundation that underpins all interactions within this ecosystem. Meanwhile, the digital environment as a new reality demands value control and synergy among stakeholders to ensure that children are not only digitally competent but also spiritually resilient.

This model not only maps the relationships among actors in character education in the digital age but also positions Maqāṣid al-Sharīʿah as a filtering framework and guiding principle for the Islamic use of technology. Thus, the contribution of this article lies in the integration of Islamic normative values and contemporary ecological approaches in digital education, which has been minimally explored in previous studies.

The results of the literature review presented earlier indicate that the challenges of the digital age in the context of children's education cannot be addressed in a piecemeal or sectoral manner. Changes in interaction patterns, increased access to technology, and the massive penetration of the internet among children and adolescents demand an educational strategy that is collaborative, adaptive, and values-based.

In this context, the roles of parents and teachers become two main pillars that must work together. Parents are no longer sufficient to merely act as caregivers at home; they must also transform into active and communicative digital parents. Meanwhile, teachers are required to play the role of digital educators who not only master technological devices but also instil spiritual values and Islamic character within the increasingly virtual learning process (Kamali, 2019; Rico, Sari, & Nugroho, 2023; Yusuf & Rahim, 2022).

The integrative approach offered in this article combines Bronfenbrenner's Ecological Theory, which emphasizes the importance of environmental influences on child development, with the concept of Maqāṣid al-Sharīʿah as a normative value framework. Thus, character education in the digital age is not only approached from a technical and pedagogical perspective but also from a philosophical and spiritual perspective.

Furthermore, this discussion will explore three main aspects: The transformation of the roles of parents and teachers in the digital ecosystem; The challenges and opportunities of Islamic character education in the digital age, and the urgency of integrating the values of Maqāṣid al-Sharīʿah into home- and school-based digital education.

1. The Transformation of the Role of Parents and Teachers in the Digital Ecosystem

Significant changes in the educational landscape in the digital age require a redefinition of the roles of parents and teachers (Daniswara & Faristiana, 2023). Parents are no longer sufficient as mere providers of their children's physical needs; they must also take on the roles of facilitators of values, digital companions, and moral guardians for their children. According to Livingstone and Helsper (2017), this role becomes increasingly crucial when children access technology without guidance, which can lead to exposure to negative content or misinformation. In the Indonesian context, UNICEF data (2021) shows that more than half of children aged 10–17 use the internet daily without adequate supervision.

This emphasizes the need to improve parent's digital literacy, not only in technical aspects but also in ethical and religious aspects. In the article wrote, it is highlighted that parents who fail to build open communication and strong Islamic values tend to allow their children to be immersed in a liberal and consumptive online culture.

Teachers, on the other hand, are undergoing a transformation from educators to facilitators, motivators, and value guides. This challenge is exacerbated by the low level of teacher readiness in managing technology-based learning. According to a survey by the Ministry of Education, Culture, Research, and Technology's Research and Development Agency (2021), only 38% of teachers feel capable of managing online learning platforms optimally. Fauzan's study (2022) reinforces that many teachers feel trapped by administrative burdens and lack technical and digital pedagogical training.

However, this article also emphasizes that synergy between teachers and parents is key. When both complement each other, parents build the foundation of values at home and teachers refine them at school a healthy and civilized digital education ecosystem is created.

2. Challenges and Opportunities for Islamic Character Education in the Digital Age

Islamic character education faces two challenges: the unstoppable flow of global information and weak value literacy among children and adolescents. This article notes that internet use among students aged 5–24 is more for entertainment (90.76%) and social media (67.65%) than for learning. This has the potential to shift the focus of education from character development to the pursuit of popularity or instant gratification (APJIL, 2024; Livingstone& Helsper, 2017; Modecki, et.al, 2022).

However, the Islamic approach views this challenge as an opportunity for digital da'wah. Islamic education is not merely about imparting knowledge (ta'lim), but also about shaping character (tarbiyah) and instilling values (ta'dib). Digital media can be used as a strategic tool to convey Qur'anic values through podcasts, interactive videos, and visual da'wah. As explained in your document, this approach requires creative teachers and parents who understand the psychology of digital children.

Yusuf and Rahim's (2022) study emphasizes that Islamic value-based content packaged with a visual and contextual approach has proven to be more effective in shaping students' moral understanding than conventional lectures. This supports the notion that digital transformation is not the enemy of values, but rather a means of conveying values if filtered correctly.

3. The Urgency of Integrating Maqāṣid al-Sharīʿah in Digital Education

This article introduces the normative approach of Maqāṣid al-Sharīʿah as an ethical and spiritual framework for framing digital education. The five main principles of Maqāṣid — preserving religion (ḥifẓ al-dīn), life (ḥifẓ al-nafs), intellect (ḥifẓ al-ʿaql), lineage (ḥifẓ al-nasl), and property (ḥifẓ al-māl) — provide a philosophical basis for curriculum development, digital content, and parent-teacher interactions in an online context (Kamali, 2019).

For example, ḥifẓ al-dīn can be manifested in the protection against content that contradicts Islamic teachings. Ḥifẓ al-nafs requires the protection of children from online exploitation and cyberbullying. Meanwhile, ḥifẓ al-ʿaql is closely related to efforts to encourage the use of technology to improve critical thinking, not just passive entertainment. In this context, Maqāṣid is not only a legal tool, but also a pedagogical framework in digital Islamic education.

4. Integrative Model: Collaboration of Values and Structure

The integrative model shown in Figure 1 emphasizes that children are at the centre of the education system, surrounded by two main actors: parents and teachers. In this

546

interaction, Islamic values serve as the guiding foundation, while the digital environment presents a challenge that must be managed. This concept reflects the principles of Bronfenbrenner's Ecological Theory, but is infused with Islamic moral values through Maqāṣid al-Sharīʿah.

This model enriches contemporary Islamic education literature by offering an alternative to approaches that are either too secular or too normative. In this context, your article offers conceptual and practical contributions to Islamic education in the 21st century.

CONCLUSION

The digital transformation triggered by the Fourth Industrial Revolution and Society 5.0 has had a major impact on education and family life. These changes are not only technological in nature, but also affect values, communication patterns, and learning methods. In this context, parents and teachers have strategic and complementary roles in shaping children's characters amid the liberal, instant, and consumptive digital flow.

This research emphasizes that digital challenges cannot be addressed solely through technical or administrative approaches. A collaborative strategy between home and school is needed, grounded in spiritual and ethical values. In this regard, the integration of Bronfenbrenner's Ecological Theory and the Maqāṣid al-Sharīʿah framework provides a strong conceptual foundation for understanding the interaction between children, parents, and teachers in the Islamic digital education ecosystem. The main findings indicate that the collaborative roles of parents as digital parents and teachers as digital murabbi need to be strategically developed in an increasingly digitized education ecosystem.

The novelty of this research lies in the development of an integrative conceptual model that combines Islamic values with the structure of modern educational systems. This model can be the basis for curriculum development, teacher training, and guidance for parents in guiding children in the digital world. In practical terms, the results of this study can be the basis for the development of value-based curricula, training for teachers and parents in digital literacy, and the formulation of Islamic education policies that are adaptive to the digital era but still based on Islamic principles.

REFERENCES

Al-Qur'an al-Karim. (n.d.). The Qur'an: Arabic text with English translation (Trans. Abdullah Yusuf Ali). Islamic Book Service.

APJII. (2024). Laporan survei internet Indonesia tahun 2024. Asosiasi Penyelenggara Jasa

Internet Indonesia. https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.

Common Sense Media. (2021). Teens and pornography: Key findings. https://www.commonsensemedia.org

Daniswara, A., & Faristiana, R. (2023). Parenting di era digital: Strategi pendampingan orang tua dalam penggunaan media digital oleh anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(1), 145–157. https://doi.org/10.31004/obsesi.v7i1.2673

Fauzan, A. (2022). Transformasi digital dalam pendidikan Islam: Peluang dan tantangan. Jurnal Pendidikan Islam, 11(2), 145–160. https://doi.org/10.19109/jpi.v11i2.8593

GoodStats. (2025). Statistik penggunaan internet pada peserta didik usia sekolah. https://www.goodstats.id/articles/penggunaan-internet-anak-2025

Hendarman, H. (2019). Penguatan kompetensi digital guru dalam menghadapi era revolusi industri 4.0. Jurnal Pendidikan dan Kebudayaan, 4(2), 129–140. https://doi.org/10.24832/jpnk.v4i2.1117

Kamali, M. H. (2019). Maqasid al-Shariah made simple (2nd ed.). International Institute of Islamic Thought (IIIT). https://iiit.org/en/book/maqasid-al-shariah-made-simple/

Kemendikbudristek. (2021). Buku saku asesmen dan pembelajaran dalam kurikulum merdeka. Direktorat Jenderal GTK.

Kemendikbudristek. (2021). Laporan survei nasional guru dan platform digital pembelajaran. Direktorat Jenderal GTK. https://gtk.kemdikbud.go.id/

Kemendikbudristek. (2023). Laporan perkembangan pelatihan guru berbasis digital nasional. https://gtk.kemdikbud.go.id/

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? Contemporary Issues in Technology and Teacher Education, 9(1), 60–70

Livingstone, S., & Helsper, E. J. (2008). Parental mediation of children's internet use. Journal of Broadcasting & Electronic Media, 52(4), 581–599. https://doi.org/10.1080/08838150802437396

Livingstone, S., & Helsper, E. J. (2017). Children, internet and risk in comparative perspective. Journal of Children and Media, 11(1), 1–5. https://doi.org/10.1080/17482798.2016.1268528

Liu, Y., Huang, J., & Wang, Y. (2024). Digital workload and teacher burnout in post-pandemic classrooms. Teaching and Teacher Education, 135, 104341. https://doi.org/10.1016/j.tate.2023.104341

Mishra, P. (2020). Considering contextual knowledge in the TPACK framework: The added value of teacher's knowledge of students. Journal of Educational Computing Research, 58(6), 1232–1256. https://doi.org/10.1177/0735633119855600

Modecki, K. L., Goldberg, R. E., Wisniewski, P., & Orben, A. (2022). What is digital parenting? A systematic review of past measurement and blueprint for the future.

548

Perspectives on Psychological Science, 17(3), 834–856. https://doi.org/10.1177/17456916211072458

Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1–6.

Puentedura, R. R. (2020). SAMR and TPCK: Intro to advanced technology integration. http://hippasus.com/rrpweblog/

Rico, R., Sari, D. P., & Nugroho, A. (2023). Literasi digital orang tua dan perlindungan anak di era internet of everything. Jurnal Pendidikan Karakter, 13(1), 1–15. https://doi.org/10.21831/jpk.v13i1.55678

Rico, R., Sari, D. P., & Nugroho, A. (2023). Peran orang tua dalam mendampingi anak di era digital: Studi kasus pada siswa sekolah dasar di Semarang. Jurnal Ilmu Sosial, Pendidikan, dan Humaniora (JISPENDIORA), 2(2), 117–132. https://doi.org/10.56910/jispendiora.v2i2.650

Twenge, J. M. (2023). Generations: The real differences between Gen Z, Millennials, Gen X, Boomers, and Silents—and what they mean for America's future. Atria Books.

Undang-Undang Republik Indonesia Nomor 27 Tahun 2022 tentang Perlindungan Data Pribadi.

UNICEF. (2021). Digital literacy and internet safety among Indonesian adolescents. https://www.unicef.org/indonesia/reports/literasi-digital-anak-indonesia

Wijoyo, A. (2020). Society 5.0 dan tantangan pendidikan karakter di era digital. Jurnal Ilmiah Pendidikan Pancasila dan Kewarganegaraan, 5(2), 100–112. https://doi.org/10.17977/um019v5i22020p100