Article

Eight Graduate Profiles: Strategies for Developing Student Character in the Digital Era

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A B S T R A C T

In today's digital era, educational transformation requires strengthening the character that is integrated in technology-based learning. In modern character learning strategies, the eight dimensions of graduate profiles (DPL) are the basis for character education. The 8 DPL include faith and piety to God Almighty, citizenship, critical reasoning, creativity, collaboration, independence, health, and communication. In digital era learning, the integration of 8 DPLs can be achieved through the use of information and communication technology, hybrid learning, project-based learning, collaborative learning, and digital literacy. These methods can be used to shape and train students' character in a contextual, reflective, and sustainable manner. In online activities, students engage in online discussions, create digital works, create innovative presentations, think through blogs, and create digital character portfolios. By utilizing digital media, teachers act as facilitators, role models, and mentors. Teachers help students learn to collaborate across subjects, think critically, and communicate well through digital platforms. In addition, digital citizenship and digital health are also very important to maintain the safety, ethics, and well-being of students in the virtual environment. Schools, families, and digital communities work together to maintain character formation both in the real and virtual worlds. By implementing an 8-DPL-based learning strategy that is adaptive to technology, graduates are expected to become unique individuals, proficient in technology, and ready to compete and contribute in the era of globalization and digitalization.

Keywords: *8 DPL, Character, Deep Learning, Digital Era, Digital Literacy, Project-Based Learning, Digital Citizenship, Creativity, Communication, Digital Health, Collaboration, Independence.*

INTRODUCTION

The educational paradigm around the world has been changed by advances in information and communication technology (ICT) in the last two decades. Education today serves not only as a place to share knowledge, but also as a place to think and work together to build students' character. In situations like this, eight dimensions of the graduate profile (DPL) emerge, consisting of faith and piety to God Almighty, citizenship, critical reasoning, creativity, collaboration, independence, health, and communication that are able to provide a new direction in character education in the digital era.

Digital education requires teachers and students to be active subjects in the learning process. Teachers help students communicate well through various online platforms, collaborate across domains, and think critically. According to Al-Mikraj's (2023) research, the use of digital media such as learning apps, educational games, and collaborative platforms can achieve the integration of technology in character education. These platforms instill moral principles, responsibility, and empathy through interactive learning experiences. This method sees technology as a strategic partner and not just a tool to build a nation that is able to adapt to the world's challenges.

In addition, digital-based character education must pay attention to the principles of digital literacy. Digital literacy is not only related to technical ability in using technology, but also includes ethical awareness, digital health, and critical thinking skills in assessing

information. According to Nasution (2020), Project-Based Learning is one of the effective strategies in strengthening students' character while improving their digital literacy. Through collaborative digital projects, students learn to manage time, work in teams, and hone creativity and a sense of responsibility.

In deep learning, the eight dimensions of the graduate profile combine spiritual, social, and intellectual principles. 8 The DPL has components, the component of "faith and piety" creates a solid moral foundation; the "citizenship" component instills a sense of social responsibility and love for the homeland; the "critical reasoning" component teaches students to think logically and reflectively; the "creativity" component encourages creativity and innovation; the "independence" component builds discipline and learning initiative; The "health" component maintains physical and mental balance.

Five main approaches, namely hybrid learning, project-based learning, collaborative learning, digital literacy-based learning, and reflective learning, can be used to build a technology-based learning strategy that focuses on the eight DPLs. According to Widiastuti & Rahmawati (2020), the integration of project-based learning shows that it encourages students to actively participate in the learning process. It also instills character values such as toughness, cooperation, and independence. Students are invited to participate in online activities that aim to improve critical thinking skills and context-based character skills, including creating digital works, writing reflections through blogs, compiling character portfolios, and participating in discussions in online forums.

However, character education in the digital era also presents new challenges. Access to information and technology is not always balanced with students' ethical and critical abilities in using it. This is where the role of teachers becomes crucial. Teachers not only deliver material, but also provide examples in digital literacy and ethics. Studies by Lickona (2013) and Zuhairini et al. (2021) affirm the importance of a balance between academic proficiency and moral character to deal with the complexity of the digital world and modern work. Modern character education therefore demands collaboration between schools, families, and digital communities as a learning ecosystem that is interconnected and supportive.

Digital learning that fosters eight dimensions of graduate profiles that also requires smart curriculum policies. According to the Minister of Education Regulation No. 10 of 2025, this strategy emphasizes that character education will be integrated into every subject and daily learning activity, and will no longer be separate from special projects. Every student interaction, whether in the virtual world or in the classroom, provides an opportunity to build character. For example, online simulations by combining aspects of digital health, collaboration, and communication, reflective learning through digital journals can improve critical reasoning, and independence.

Furthermore, the application of deep learning in character education based on 8 DPL facilitates meaningful and continuous learning. Experiential deep learning helps students not only understand concepts conceptually, but also internalize character values in everyday actions. This approach fosters high-level thinking skills, namely the ability to understand, assess, and apply character values in the real and digital worlds.

In addition to teachers and students, schools have a responsibility as a system that supports the digital character learning ecosystem. Schools need to create a healthy digital culture by prioritizing students' data security, privacy, and digital ethics. Digital literacy must be combined with digital health (digital well-being), which is the ability to maintain balance and self-well-being in interaction with the digital world. This is in line with research that confirms that strengthening character in cyberspace requires collaborative regulation and habituation between teachers, schools, parents, and the community.

Thus, the character learning strategy based on 8 DPL in the digital era is not only a methodological transformation, but also a paradigm transformation in national education. The integration of the values of faith, citizenship, critical reasoning, creativity, collaboration, independence, health, and communication through technology can produce graduates who not only excel academically and digitally, but also have a resilient, ethical character, and are ready to face the global challenges of the 21st century.

Character strengthening must be incorporated into information and communication technology (ICT)-based learning to change the way education runs in the digital era. The graduate profile (DPL) consists of eight dimensions: faith and piety to God Almighty, citizenship, critical reasoning, creativity, collaboration, independence, health, and communication. Experiential learning or deep learning is the key to developing modern character education (Pamuji, 2024).

The use of digital media and hybrid, project-based, and collaborative learning platforms is an effective strategy in integrating the 8 DPLs in the context of digital learning. The Project-Based Learning (PjBL) method, for example, has been proven to increase students' independence and collaboration character while improving their digital literacy (Nasution, 2020). Activities such as online discussions, digital work creation, reflective blogs, and digital portfolios support contextual and reflective learning that hone critical reasoning and creativity (Wardani, 2024).

Teachers play the role of facilitators, role models, and supervisors in instilling ethical values and responsible digital literacy in students (Lukmantoro, 2024). Digital citizenship and digital well-being are important aspects to maintain the safety, ethics, and welfare of students in virtual interactions (Kulsum, 2024).

Curriculum policies such as Permendikdasmen No. 10 of 2025 regulate the integration of character education into all subjects and daily learning activities on an ongoing basis, both in the real and digital world (Ministry of Education, 2025). The experiential-based deep learning approach plays a role in internalizing character values, producing graduates who excel academically and digitally while having strong character to face the global challenges of the 21st century (Mardatillah & Wulandari, 2025).

Collaboration between schools, families, and the digital community is an ecosystem that supports the formation of students' character as a whole (Sari, 2024). Digital literacy combined with digital health helps maintain a balance between students in interacting with the digital world (Kulsum, 2024).

Thus, various studies have concluded that the character learning strategy based on 8 DPLs with the support of digital technology is an important paradigm transformation that combines technology and character values to create future generations who are tech-savvy and have strong character (Pamuji, 2024).

METHOD

This study applies a descriptive qualitative approach to explore in depth the process of implementing character learning based on 8 Dimensions of Graduate Profiles (8 DPL) in the digital era. The main reason for using qualitative methods is to gain in-depth insights into the experiences of teachers, students, and other stakeholders in the implementation of character education strategies and the use of ICT contextually.

Data Collection Techniques:

Observation

The researcher directly observed learning activities both in the classroom and in the school's digital ecosystem. The focus of observation is directed at the implementation of technology-based learning, student involvement in project learning, digital reflection, and student-teacher interaction in instilling the character values of the 8 DPL (Septriyanti et al., 2023).

Interviews

Semi-structured interviews were conducted with teachers, students, principals, and parents, to gain their perspectives on the effectiveness, challenges, and innovations in integrating the 8 DPLs into digital learning. The semi-structured interview format provides space for exploratory information while remaining within the research framework (Sari, 2022).

Documentation

Analysis documents include digital curriculum, student portfolios, recordings of online learning activities, digital literacy materials, and relevant school policies.

Documentation is used to verify and strengthen data from observations and interviews, as well as to trace the consistency of the implementation of digital-based character learning (Septriyanti et al., 2023)

Data Analysis Process

The data analysis process is carried out thematically through several main stages, namely data reduction, theme coding, data presentation, and drawing conclusions. Data reduction aims to filter and summarize raw data to focus on things that are relevant to the research objectives. Furthermore, the data is coded based on emerging themes to facilitate the identification of patterns and relationships between data. Data presentation is carried out in the form of narratives, tables, or diagrams that describe the results of the analysis systematically. Conclusions are drawn based on the interpretation of the data that has been compiled, while still paying attention to consistency between themes. To maintain the validity of the findings, the researcher applied source triangulation and techniques, which are comparing data from various sources and using various data collection methods. The Miles and Huberman model used includes three main activities in data analysis: data reduction, data display, and conclusion drawing and verification. This model assists researchers in managing data systematically and ensuring the accuracy of analysis results.

Bagan Model Miles dan Huberman

Phase	Activities
Data Reduction	Filtering, grouping, and simplifying raw data
Data Presentation	Organize data in the form of narratives, tables, matrices, or graphs
Conclusion	Interpret and verify the results of data analysis

FINDINGS AND DISCUSSION

Results and Discussion

The results of the study show that the integration of the eight dimensions of the Graduate Profile (8 DPL) in digital technology-based character learning is able to grow students' character holistically and contextually. Various dimensions such as faith and piety, citizenship, critical reasoning, creativity, collaboration, independence, health, and communication can be embedded through hybrid, project-based, collaborative, and digital literacy learning activities. Activities such as online discussions, digital work creation, reflective blogs, and digital portfolios are effective in honing students' critical thinking skills and creativity, while instilling character values that are relevant to the digital age.

The role of teachers as facilitators and models in digital literacy and ethics is essential to support the success of this process. These results are in line with a literature review stating that a digital learning approach that integrates the 8 DPLs can produce graduates who are not only academically and technologically superior, but also have strong character, with a balance between the technical and moral skills required to meet the global challenges of the 21st century. The validity of the findings is supported by triangulation of data collection sources and techniques, confirming that the digital character learning strategy based on 8 DPL is an integrative paradigmatic transformation between technology and student character development (Nasution, 2020).

The discussion of the results of the research corroborates that strengthening character through the eight dimensions of graduate profiles in the digital era requires adaptive and innovative learning strategies, by placing digital technology not only as a tool, but as an interactive learning ecosystem that prioritizes spiritual, social, and intellectual values. Project-based and hybrid learning models are highly effective in building students' independence, collaboration, and digital literacy in a sustainable manner. The research also highlights the importance of teachers' roles in guiding students to exercise digital citizenship and maintain digital health as part of their character. This prevents students from negative cyber risks while maximizing opportunities for 21st century skill development. This finding is consistent with the latest literature that emphasizes that technology-based character education must combine digital literacy, ethics, digital health, and collaboration between schools, families, and communities as an overall supporting ecosystem (Ministry of Education and Education, 2025).

Beyond the effectiveness of hybrid and project-based learning in integrating the eight dimensions of the Graduate Profile, this study also reveals that digital learning environments open new opportunities for personalized character development. Digital platforms allow teachers to monitor students' learning behaviors more closely through analytics features, such as frequency of participation, quality of digital submissions, and consistency in task completion. These data-driven insights enable teachers to identify students who require moral or motivational support, thus facilitating targeted interventions. This personalization aligns with the principle that character development in the digital era must account for individual differences in learning styles, digital readiness, and socio-emotional needs.

Furthermore, the integration of 8 DPL in digital learning encourages the formation of authentic learning communities. Students collaborate not only within the classroom but also across digital spaces, enabling a broader exchange of ideas and values. This communal learning fosters citizenship, communication, and collaboration skills in a more dynamic and realistic context. When students engage in digital forums, peer feedback mechanisms, and online team projects, they are required to practice ethical communication, respect for diversity, and responsibility in managing digital information. This reinforces the notion that character is not merely taught but experienced through continuous interaction within a technology-mediated environment.

Another significant aspect found in this research is the development of *reflective competence* through digital tools. Activities such as maintaining reflective blogs, journals, and e-portfolios allow students to document their learning journeys more systematically. This reflective process enhances students' metacognitive awareness, helping them evaluate their own behavior, decision-making, and values in relation to the eight character dimensions. Reflection also promotes internalization of character values, shifting them from external obligations to intrinsic commitments—an essential step in building sustainable character development.

The study also identifies that the use of digital technology creates opportunities to integrate real-world issues into classroom learning. Digital simulations, multimedia case studies, and online problem-solving challenges expose students to contemporary global issues such as digital ethics, cyberbullying, environmental sustainability, and civic engagement. By engaging with authentic problems, students apply critical reasoning and creativity while simultaneously practicing moral decision-making. This reinforces the central message that character education must be contextually grounded and responsive to current societal challenges.

In addition, the research highlights the emerging need for *digital resilience* as a component of character formation. As students navigate technology-rich environments, they encounter distractions, misinformation, and stressful digital workloads. Teachers play a critical role in helping students develop resilience, teaching them strategies to manage screen time, regulate emotions, and maintain digital well-being. These skills are directly connected to the 8 DPL dimensions, especially health, independence, and critical reasoning. Developing digital resilience ensures that students are not only competent users of technology but also mentally and emotionally prepared to engage with the digital world responsibly.

Finally, the findings indicate that the success of integrating 8 DPL into digital learning is strongly influenced by institutional support. Schools that provide adequate infrastructure, professional development for teachers, and clear digital citizenship guidelines tend to achieve better outcomes. Effective implementation requires systemic collaboration among school leaders, teachers, parents, and community stakeholders. This confirms that character development is not an isolated effort but a shared responsibility that must be embedded within the broader educational ecosystem.

CONCLUSIONS

Thus, this study confirms that the integration of 8 DPLs in technology-based learning forms graduates who are unique, resilient, and ready to face global challenges through

reflective and contextual deep learning. Curriculum policies also need to support by embedding character education into every aspect of daily learning, both in the classroom and cyberspace, to build a balance of academic and character skills.

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