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Journal homepage: http://www.dwijmh.org
ORCID ID: https://orcid.org/0000-0001-6884-3504

Alternative strategies and approaches in integrating 21st-century skills into the Matatag classrooms and their challenges

Carlo A. Espiritu: *Graduate School of Education, Divine Word College of Laoag, Laoag City, Ilocos Norte, Philippines.*

A R T I C L E I N F O

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A B S T R A C T

The rapid evolution of the 21st century demands a shift in educational paradigms to equip learners with essential skills beyond traditional memorization. The Revised Matatag Curriculum in the Philippines addresses this need by emphasizing the holistic development of elementary students through 21st-century competencies such as critical thinking, problem-solving, communication, collaboration, and creativity. This study explores teachers' perspectives at Eulalio F. Siazon Memorial Elementary School on integrating these skills within the curriculum and examines the challenges faced in implementation. Using a phenomenological qualitative design, the research involved 15 elementary teachers, employing structured interviews and thematic analysis to capture authentic experiences. Teachers reported employing strategies such as collaborative learning, technology integration, and project-based learning to foster these competencies. However, significant challenges were noted, including limited resources (e.g., devices and internet access), time constraints in an already dense curriculum, insufficient professional development, and varied student readiness, especially for learners with diverse needs. The findings highlight the curriculum's progressive, student-centered pedagogies aligned with global education trends, promoting foundational skills alongside socio-emotional growth and inclusivity. Yet, the success of the Matatag Curriculum depends greatly on robust administrative support, policy clarity, and comprehensive teacher training to overcome resource and implementation barriers. The study concludes that while the curriculum provides a solid framework for preparing learners for future demands, systemic interventions are necessary to optimize instructional practices and ensure equitable access to quality education.

Introduction

The rapid advancement of the 21st century has significantly transformed the skills and knowledge necessary for success in both personal and professional domains (Trilling & Fadel, 2009). Traditional educational approaches, which focus heavily on rote memorization and standardized testing, are increasingly challenged to prepare students to thrive in a complex and dynamic world (Darling-Hammond, 2010). In alignment with these demands, the Matatag Curriculum for Elementary education

* *Corresponding author. ORCID ID: 0000-0001-6884-3504*

was introduced in the Philippines, emphasizing the holistic development of learners by integrating essential 21st-century skills (Department of Education [DepEd], 2023a; Lagbao, 2024).

The Matatag Curriculum underscores the need to equip students with critical skills such as critical thinking, problem-solving, collaboration, communication, and creativity (World Economic Forum, 2016; DepEd, 2024). These competencies are essential for navigating the fast-changing societal and workplace landscapes. By strengthening foundational literacy and numeracy skills, especially in early grades, the curriculum ensures a solid academic base that supports the acquisition of more advanced skills. This targeted approach also enhances student engagement and motivation by making education relevant and purposeful (Lagbao, 2024; JIP Publications, 2025). Moreover, the Matatag Curriculum places a strong focus on inclusivity and equitable access to education. For institutions like Eulalio F. Siazon Memorial Elementary School, this means providing every learner with the opportunity to develop 21st-century skills regardless of their background. Such inclusivity helps bridge educational disparities and prepares students not only for academic success but also for meaningful participation in society (DepEd, 2023b; UNESCO, 2025).

Additionally, the MATATAG Curriculum is a significant reform in the Philippine education system, introduced to address various challenges that have affected student learning outcomes under the previous K to 12 programs. One of the key issues was an overloaded and congested curriculum that placed excessive demands on both educators and students, hindering the mastery of essential skills such as literacy and numeracy. To tackle these problems, the MATATAG Curriculum focuses on reducing the number of competencies and prioritizing foundational skills, especially in the early grades, thus creating a more focused and manageable learning experience. This approach supports deeper understanding and mastery of key concepts while promoting student engagement by making learning more relevant and purposeful. The curriculum also aims to strengthen socio-emotional skills and values formation, ensuring the holistic development of learners from Kindergarten through Grade 10 in a phased implementation schedule starting in the school year 2024-2025. It is designed to nurture not only academic proficiency but also the moral and emotional well-being of students, thereby preparing them to become responsible, job-ready, and patriotic citizens.

Central to the MATATAG Curriculum is the emphasis on critical 21st-century skills such as critical thinking, problem-solving, creativity, collaboration, and communication. These competencies are integrated across various learning areas, reflecting a shift toward competency-based and learner-centered education. The curriculum promotes active learning strategies, such as inquiry-based projects and group work, fostering collaboration and communication among students. Additionally, it aligns with global educational trends by incorporating digital literacy and adaptable skills necessary for the rapidly evolving societal and workplace landscapes. The curriculum encourages mastery of foundational skills like reading and numeracy early on, which serves as a solid base for acquiring these advanced competencies. This comprehensive development prepares students for lifelong learning and meaningful participation in society.

Inclusivity and equitable access are also key pillars of the MATATAG Curriculum. The program is designed to provide every learner, regardless of background, with the opportunity to develop essential

skills and competencies. It supports inclusive education by employing differentiated instruction, accessible resources, and individualized support as needed. This focus on inclusion helps bridge educational disparities across regions and socio-economic groups, enhancing the overall quality of education and social cohesion. Specific to institutions like Eulalio F. Siazon Memorial Elementary School, the curriculum mandates that all students receive a holistic education that includes cultural literacy, peace competencies, and values education. This inclusive approach not only fosters academic success but also cultivates learners' ability to engage constructively in their communities and the nation. The MATATAG Curriculum represents a comprehensive effort to reform Philippine basic education by simplifying and decongesting the curriculum, emphasizing foundational skills, cultivating 21st-century competencies, and ensuring inclusivity and values formation. These reforms collectively aim to prepare students for the complexities of the modern world, promoting academic excellence, personal growth, and social responsibility

While the MATATAG Curriculum and its components have been described extensively in policy documents and preliminary studies (DepEd, 2023a; Lagbao, 2024; UNESCO, 2025), there remains a limited body of empirical research that specifically investigates the practical strategies and approaches used to integrate 21st-century skills within classrooms adopting this curriculum. Previous studies have mostly focused on curriculum design and policy frameworks rather than classroom-level implementation and challenges faced by educators (World Economic Forum, 2016). Moreover, few studies have explored how these integration efforts resonate in diverse and inclusive school settings, particularly in contexts such as Eulalio F. Siazon Memorial Elementary School, where socio-economic and regional disparities may influence educational outcomes.

Existing literature also shows gaps concerning the challenges teachers encounter when applying these innovative approaches and the effectiveness of various strategies in fostering critical thinking, creativity, and collaboration among learners. Limited research addresses how foundational literacy and numeracy skills can be simultaneously strengthened alongside 21st-century competencies without overwhelming students or educators, as highlighted in the transition from the K to 12 program to MATATAG Curriculum (DepEd, 2023b).

Thus, this study aimed to explore teachers of Eulalio F. Siazon Memorial Elementary School (EFSMES) in terms of proposed strategies and approaches integrating 21st-century skills into the matatag classrooms and its challenges and its influence on student success in order to bridge the gaps. Likewise, with the challenges faced by educators in effectively implementing these skills within the new curriculum framework, the study seeks to identify specific obstacles such as resource limitations, varying student learning needs, and adapting teaching methodologies to align with competency-based education. Understanding these challenges provided insight into how the curriculum can be better supported and tailored to meet both teacher and learner’s needs. Ultimately, this research had the goal to contribute to enhancing instructional practices that foster critical thinking, problem-solving, creativity, and collaboration among students, leading to improved academic outcomes and holistic development in EFSMES’s diverse learner population.

Literature review

The purpose of the literature review is to deepen the understanding of the study's concept and to establish theories to be investigated. The presentation of the literature review is arranged thematically. The following provides a comprehensive review of existing literature on the integration of 21st-century skills into education. The focus is on exploring educators' perspectives on this integration and its impact on student success. This review aims to provide a theoretical foundation for current research, highlighting key concepts, challenges, and opportunities related to 21st-century skills in education.

Defining 21st-century skills

The concept of 21st-century skills has gained significant traction in educational discourse, though its definition remains fluid and debated. It generally includes a set of essential skills for success in a rapidly evolving world shaped by technological advancements, globalization, and a dynamic knowledge economy. Commonly recognized skills are critical thinking and problem solving, communication and collaboration, creativity and innovation, information literacy and technology, and personal and social responsibility. Critical thinking involves analyzing information, identifying problems, generating solutions, and making informed decisions, with an emphasis on logical reasoning and evidence evaluation (Facione, 2015). Communication and collaboration focus on conveying ideas effectively, teamwork, and respectful dialogue (Partnership for 21st Century Skills, 2011). Creativity and innovation require generating new ideas, adapting to change, and using new technologies (Bellanca & Brandt, 2010). Information literacy includes accessing, evaluating, and using information responsibly, often involving digital literacy (National Research Council, 2012). Personal and social responsibility encompasses ethical behavior, empathy, civic engagement, and acting as global citizens (UNESCO, 2015).

Educators' perspectives on 21st-century skills integration

Research exploring educators' perspectives on integrating 21st-century skills into the curriculum reveals both enthusiasm and challenges. Educators generally recognize the importance of these skills for student success in the 21st century (Trilling & Fadel, 2009). However, they often face obstacles in implementing these skills due to factors such as the first one which is limited time and resources. Educators often struggle to find time in their already packed schedules to incorporate new teaching strategies and activities that foster 21st-century skills (Darling-Hammond, 2010). They may also lack access to adequate resources, such as technology, materials, and professional development opportunities. The next is Lack of Training and Support. Many educators feel unprepared to teach 21st-century skills effectively. They may lack the necessary training and support to develop new teaching approaches and assess student learning in these areas (Bellanca & Brandt, 2010).

Moreover, curriculum and assessment constraints are included. Traditional curriculum models and standardized assessments may not adequately address the development of 21st-century skills. This can create tension between the need to prepare students for these skills and the pressure to meet standardized testing requirements (Partnership for 21st Century Skills, 2011).

Despite these challenges, educators are actively seeking effective strategies and resources to support the development of 21st-century skills. This includes exploring project-based learning, inquiry-based teaching, technology integration, and collaborative learning approaches (National Research Council, 2012).

On the other hand, strategies to teach these skills effectively include creating learning environments that encourage questioning, curiosity, and reflection to foster critical thinking. Problem-based learning (PBL) immerses students in real-world scenarios that promote active engagement, collaboration, and creativity. Encouraging open-ended questions helps students think deeply and explore multiple perspectives, while collaborative learning exposes students to diverse viewpoints and enhances communication skills. Integrating interdisciplinary learning and technology enables creative expression and innovation through varied approaches and tools. Providing constructive feedback and time for reflection supports continuous growth in creative and problem-solving abilities. Additionally, creating a culture that embraces mistakes as learning opportunities helps students develop resilience and a growth mindset crucial for creativity. These strategies are woven into student-centered, active learning classrooms where educators model 21st-century skills and regularly assess student progress to tailor instruction (National Research Council, 2012).

Impact of 21st-century skills integration on student success

Research studying the impact of integrating 21st-century skills on student success consistently reveals a positive correlation between the development of these skills and improved educational outcomes. For example, integrating skills such as critical thinking, problem-solving, communication, creativity, and collaboration fosters increased student engagement, enabling learners to connect more deeply with the content and develop a more profound understanding of concepts. This deeper cognitive engagement often translates directly into improved academic performance (Bellanca & Brandt, 2010).

Learning experiences that incorporate 21st-century skills tend to be more relevant and meaningful to students, which significantly raises their levels of engagement and motivation. When students find their learning purposeful and applicable to real-world situations, they take greater ownership of their education, developing intrinsic motivation that supports ongoing success (Trilling & Fadel, 2009).

Moreover, students who develop these competencies show greater preparedness to face future challenges. In a rapidly changing global landscape characterized by complex problems and continuous innovation, 21st-century skills equip students with adaptability, critical reasoning, and problem-solving capabilities crucial for long-term success in higher education, careers, and civic life (Partnership for 21st Century Skills, 2011).

Beyond individual outcomes, integrating 21st-century skills promotes equity by catering to diverse learning needs and styles. According to the National Research Council (2012), such integration helps reduce educational disparities by ensuring all students—regardless of background—have access to opportunities to develop essential competencies. This helps level the playing field, combating systemic inequalities and fostering inclusive environments conducive to success for all learners.

Educators play a pivotal role in implementing 21st-century skill integration. Their perspectives and experiences are critical for identifying effective instructional strategies and overcoming challenges. While substantial benefits exist, practical challenges such as the need for adequate professional development, resources, and appropriate technological infrastructure remain barriers. Teachers often need support in shifting from traditional content delivery to active, collaborative, and inquiry-based pedagogies that foster these skills. Assessment methods must also evolve to measure such complex competencies comprehensively.

Addressing these challenges requires ongoing research, collaboration among stakeholders, and systemic support to create learning environments that are inclusive, engaging, and effective. By empowering educators and designing curricula that balance foundational knowledge with 21st-century competencies, education systems can better prepare students for success in an increasingly complex world.

Statement of the problem

This study aimed to explore teachers of Eulalio F. Siazon Memorial Elementary School (EFSMES) in terms of their perspectives on integrating 21st-century skills into the Revised Matatag curriculum and its influence on student success in order to bridge the gaps.

Specifically, it sought to answer the following research questions:

1. What are the alternative strategies and approaches that educators employ to integrate 21st-century skills into the Matatag classrooms?

2. What are the key challenges they face in implementing these skills in their teaching practices?

Research methodology

This section outlines the research procedures and steps to gather the data and information needed to come up with the findings.

Research design

Phenomenological qualitative research design was employed to explore and understand the lived experiences and perspectives of educators regarding the integration of 21st-century skills within the Revised Matatag curriculum. This approach allowed the researcher to deeply examine how teachers made sense of their experiences, emphasizing the meanings they attributed to integrating these skills in their classrooms. The use of phenomenology enabled a detailed and nuanced understanding beyond surface descriptions by capturing authentic, first-person accounts from participants. Through reflective narratives, educators shared their challenges and successes, including how diverse student backgrounds influenced their teaching approaches. The flexibility of this approach fostered a dynamic interaction between the participants lived realities and the researcher's interpretations, resulting in a comprehensive and rigorous analysis that uncovered multi-layered meanings behind the phenomenon under study. This ensured the findings were firmly grounded in the real-world experiences of those directly involved, providing rich insights into the practical implications and educational significance of integrating 21st-

century skills in the Matatag classrooms. This approach is widely recognized in educational research for its capacity to reveal the essence of human experiences and contribute substantially to theory and practice

Locale of the study

This study was conducted exclusively at Eulalio F. Siazon Memorial Elementary School (EFSMES) under SDO Laoag City. The Schools Division Office of Laoag City governed the operations of these schools, ensuring the delivery of quality education. EFSMES operates under this division, which is known for its robust efforts in improving basic education through program innovations and teacher training to support curricula such as the Matatag Curriculum. The locale represents a typical urban school setting within Region I where foundational and 21st-century skills integration is being actively pursued in response to national educational reforms.

Respondents

The participants in this study consisted of 15 teachers, randomly chosen from Eulalio F. Siazon Memorial Elementary School. These elementary General education teachers come from diverse teaching backgrounds and grade levels; all affiliated with the Schools Division Office of Laoag City (SDOLC). As frontliners in curriculum implementation, their perspectives and experiences are crucial for understanding the dynamics of integrating 21st-century skills into the Revised Matatag Curriculum. Their roles place them at the heart of direct interaction with learners, allowing them to provide rich insights into the challenges, successes, and pedagogical adjustments related to this curricular reform. The respondents' contributions provided valuable qualitative data that reflect the realities of teaching in this evolving educational landscape within the city.

Population and sampling

This study targeted 15 EFSMES Teachers from the Schools Divisions of the City of Laoag, Schools Division Office of Laoag City (SDOLC). The researcher used random sampling for this study.

Data gathering instruments

This research employed a structured interview approach using a pre-designed interview guide with a fixed set of open-ended questions for all participants. This standardized format ensured consistency in data collection, allowing for direct comparison of responses across the 15 teacher-respondents. To uphold ethical research practices, a consent letter was provided to participants beforehand, outlining the study's purpose and procedures. The interview guide underwent rigorous content validation to ensure its reliability and accuracy. Prior to conducting the interviews, the research tool was revised, analyzed, and adjusted based on the validation results, ensuring its suitability and effectiveness for data collection. This approach aligns with established methods in educational research, where structured interviews promote standardization and reliability while enabling the collection of rich qualitative data through open-ended questions (; web. The use of a validated, fixed interview guide minimized biases and facilitated meaningful analysis of consistent data across participants, enhancing the trustworthiness of the study's findings.

Instrumentation and data collection

Semi-structured interviews were conducted with educators to gather their perspectives on integrating 21st-century skills into the curriculum and its impact on student success. Focus groups were also conducted with groups of educators to facilitate discussions and explore shared experiences and perspectives. Relevant documents, such as curriculum materials, lesson plans, and professional development resources, were analyzed to identify the extent to which 21st-century skills were integrated into practice. The collected data were analyzed using thematic analysis to identify key themes and patterns in the data, providing insights into the perspectives and experiences of educators. Additionally, content analysis was applied to curriculum materials and other documents to examine the presence and nature of 21st-century skills integration, focusing on systematically coding and quantifying relevant content to complement the qualitative thematic findings. This approach allowed for a rigorous and comprehensive understanding of both educators' experiences and curricular evidence of 21st-century skills integration.

Ethical considerations

The researcher included safeguards to prevent harm to all participants and stakeholders involved in the research study. Following Rubin and Rubin's (2012) emphasis on respect and honesty, the researcher ensured that no harm, exploitation, or undue pressure was exerted on participants and complied with established IRB regulations. Recognizing that exploitation can take many forms, Seidman (2006) highlighted the inherent power imbalance between researcher and interviewee, cautioning against perceived exploitation for scholarly gain. Accordingly, the researcher provided all participants with informed consent, adhered to IRB guidelines for sample selection, and maintained vigilance throughout the research process for any emerging ethical dilemmas. Drawing on Cypress (2018), the researcher carefully considered the interview setting, protected participant consent and rights, and implemented a strategic and ethical approach to sampling, data collection, and dissemination. Confidentiality of all teacher-participants was strictly maintained; although real names were used for transparency, transcriptions and data were encoded and securely stored. Furthermore, these data were destroyed at the conclusion of the research process to uphold privacy and ethical standards. This approach aligns with ethical guidelines for educational research in the Philippines, emphasizing respect for participant autonomy, protection of vulnerable groups, confidentiality, and adherence to local IRB and national ethical standards ensuring the welfare and rights of all involved.

Results

Problem 1: The alternative strategies and approaches that educators employ to integrate 21st-century skills into the Matatag classrooms

Category 1: Use of collaborative learning

Collaborative learning plays a crucial role in fostering teamwork, communication, and critical thinking skills among students. Educators in the Matatag classrooms often leverage group work as a strategy to enhance student engagement and encourage social learning. As R1 and R2 mentioned…

> ***R1-****"I often divide the class into groups to encourage teamwork and communication in the Matatag classroom." This method not only encourages cooperative skills but also improves interpersonal interactions, crucial for student development in the 21st century."*
>
> ***R2-*** *Peer discussions help students develop critical thinking skills in the Matatag classroom." The emphasis on peer interactions nurtures critical thinking, a skill vital for tackling complex real-world problems.*

Category 2: Technology integration

The integration of digital tools is increasingly recognized as essential for fostering a modern learning environment. As R3 and R4 noted…

> ***R3-*** *"We use digital tools to enhance research and presentation skills in Matatag classrooms," showing that educators are incorporating technology to build essential digital literacy.*
>
> ***R4****- "Incorporating multimedia resources engages students better in Matatag classrooms." The use of multimedia resources, such as videos, simulations, and interactive platforms, not only enhances student engagement but also caters to various learning styles, facilitating a deeper understanding of content.*

Category 3: Project-Based Learning

Project-Based Learning (PBL) encourages students to actively engage with real-world problems, fostering problem-solving and application of learned concepts. R5 and R6 stated…

> ***R5-*** "*Students work on real-life projects to apply problem-solving in the Matatag classroom." PBL not only provides a platform for practical learning but also builds critical thinking and adaptability.*
>
> ***R6-****"Projects motivate learners to connect lessons with actual scenarios in Matatag classrooms." This connection between classroom learning and real-life contexts makes education more meaningful and relevant, preparing students for future challenges."*

Problem 2: The key challenges they face in implementing these skills in their teaching practices

Category 1: Limited resources

Limited access to technology and teaching materials remains a significant barrier in implementing 21st-century skills in the classroom. As R7 and R8 expressed…

R7-*"We lack sufficient gadgets and internet access for all students in the Matatag classroom," which limits the ability to integrate technology into lessons effectively."*

R8- *"Budget constraints make it hard to update teaching materials used in Matatag classrooms," highlighting how financial limitations impact the quality of instruction and the implementation of modern teaching strategies."*

Category 2: Time constraints

Time management is a constant challenge in schools, particularly with a packed curriculum. R9 and R10 shares these…

R9-*"The curriculum is already packed, limiting time for 21st-century skills focus in the Matatag classroom." The time required to teach complex skills like critical thinking and collaboration often competes with the need to cover traditional subject matter."*

R10- *"Preparing innovative lessons for Matatag classrooms takes additional time we often don't have," suggesting that while teachers are eager to adopt innovative methods, time remains a significant obstacle."*

Category 3: Teacher training and confidence

Despite the enthusiasm for technology integration and innovative teaching strategies, teacher preparedness is a concern.

R11 *mentioned, "Some teachers need more training on using technology effectively in Matatag classrooms," revealing that ongoing professional development is necessary for educators to feel confident in using modern tools."*

R12 *added, "I sometimes feel unsure about how to assess these skills properly in the Matatag classroom," suggesting that there is a need for clearer frameworks on how to assess skills like critical thinking and collaboration."*

Category 4: Student readiness and engagement

Adapting to new learning methods can be challenging, especially for students who are not accustomed to interactive and project-based learning environments.

R13 *observed, "Some students struggle to adapt to new learning methods in the Matatag classroom,"*

while ***R14*** *noted, "Engaging all learners, especially those with special needs, remains challenging in Matatag classrooms." These responses*

highlight the importance of differentiating instruction and providing adequate support to ensure that all students benefit from these modern teaching methods."

Category 5: Support and policy

Support from school leadership and appropriate policies are critical in facilitating the adoption of 21st-century teaching practices.

***R15** noted, "There needs to be more support from administration for initiatives in Matatag classrooms." This reflects the need for strong institutional backing to implement effective teaching practices that incorporate technology and innovative methodologies."*

Discussion

The integration of 21st-century skills into Matatag classrooms promises substantial benefits for student growth, yet it also reveals essential needs for more resources, enhanced teacher training, and stronger structural support to sustain these initiatives. Schools must prioritize equitable resource allocation by providing adequate digital devices, reliable internet access, and updated instructional materials to support collaborative learning, technology use, and project-based learning. Continuous professional development is vital for teachers to confidently incorporate digital tools and innovative methods through targeted training on technology and assessment strategies. Curriculum adjustments are needed to balance traditional subjects with critical 21st-century skills like critical thinking, collaboration, and problem-solving, creating flexibility to accommodate project-based learning despite time constraints. Lastly, addressing diverse student readiness through differentiated instruction and targeted support for learners with special needs will help ensure all students engage successfully with these new approaches.

These corroborate the study of Koehler & Mishra (2021), exploring the interplay of technology, pedagogy, and content knowledge wherein this study highlights the importance of teacher training in using technology and developing pedagogical strategies that align with modern educational goals, similar to the needs expressed in responses regarding technology integration. Moreover, according to Johnson & Becker (2022) their report discusses the growing trend of integrating technology in classrooms and the challenges educators face in adapting to new teaching methods, aligning with the responses on the need for more technology and multimedia resources.

The analysis presented from the responses offers a comprehensive understanding of how educators at Eulalio F. Siazon Memorial Elementary School integrate 21st-century skills into Matatag classrooms, along with the challenges they face. The responses from 15 teacher-respondents reveal meaningful strategies, primarily involving collaborative learning, technology integration, and project-based learning. These methods resonate with contemporary educational practices that emphasize active, student-centered learning environments to foster critical thinking, communication, creativity, and problem-solving skills, which are foundational competencies required in the 21st century (DepEd, 2023a).

Moreover, the analysis of responses from 15 teachers at Eulalio F. Siazon Memorial Elementary School reveals that 21st-century skills are integrated into Matatag classrooms through collaborative learning, technology use, and project-based activities, such as group work to foster teamwork and peer discussions to develop critical thinking. Educators use digital tools and multimedia to engage students and enhance research skills, while real-life projects motivate learners to apply problem-solving in practical contexts. However, challenges like limited gadgets and internet access, budget constraints, packed curricula, and the additional time needed to craft innovative lessons hinder full implementation. Teacher training and confidence in technology use and assessment also need strengthening, as does support for students who struggle with new methods or require special accommodation. Research confirms the curriculum's alignment with global competencies yet highlights the need for deeper technology integration and inquiry-based learning. Importantly, teachers call for stronger administrative support through better resources, professional development, and policy guidance to overcome these barriers and fully realize the potential of the Matatag Curriculum in preparing learners for the future.

Technology integration surfaced as another key approach, where digital tools and multimedia resources are leveraged to engage students more effectively and enhance research capabilities. This is consistent with the curriculum's emphasis on digital literacy as an essential component of lifelong learning and adaptability in an increasingly digital world. Further, project-based learning was noted as a powerful instructional strategy that connects educational content to real-life contexts, increasing student motivation and facilitating the application of knowledge through problem-solving activities.

While these strategies demonstrate educators' commitment to fostering 21st-century skills, the data also reveal persistent challenges that complicate implementation. Limited resources were a significant barrier, with teachers reporting insufficient access to devices and reliable internet connectivity. This limitation constrains the reach of technology-enhanced learning and highlights disparities in infrastructure that affect the quality and equity of education delivered. Such resource constraints are well-documented in the Philippine context and remain a pressing issue in rural and urban schools alike. Additionally, time constraints were frequently mentioned, with teachers expressing difficulties in balancing an already dense curriculum while dedicating sufficient time to nurture 21st-century competencies. This tension reflects a broader challenge in education systems worldwide, where curricular decongestion remains a priority to allow space for skill development beyond content acquisition (DepEd Order No. 10, s. 2024).

Teacher training and confidence emerged as another notable challenge. Some educators indicated a need for deeper professional development to effectively integrate technology and innovative methodologies, as well as to confidently assess complex competencies like creativity, collaboration, and critical thinking. This echoes findings from other studies emphasizing that continuous capacity-building and instructional coaching are vital for empowering teachers to adjust pedagogical practices in line with competency-based education reforms (). Furthermore, student readiness and engagement presented challenges, particularly with learners who have diverse needs or difficulty adapting to new learning approaches. This highlights the necessity of differentiated instruction and inclusive teaching strategies embedded in

the Matatag Curriculum, underscoring the importance of ongoing teacher support to address learner diversity (DepEd, 2023b; UNESCO, 2025).

Moreover, research studies support and corroborate the discussion about the integration of 21st-century skills in the Matatag Curriculum. For instance, a study published in 2024 highlights that the Matatag Curriculum emphasizes core skills such as critical thinking, communication, collaboration, and creativity, aligning with global frameworks for 21st-century education Kaware (2022) notes that integrating media, information, and technology skills helps students connect classroom learning to real-world experiences, enhancing their overall performance both academically and in life. Additionally, Gagalang (2022) emphasizes that even though the curriculum addresses technological skills, there is a need for further integration of digital tools and inquiry-based learning strategies, which are crucial for developing deeper engagement and critical thinking skills.

Furthermore, teacher perspectives research from 2025 indicates that the curriculum represents a significant shift in the Philippine educational system aimed at modernizing teaching practices with a focus on 21st-century skills but also highlights ongoing challenges in resource availability and teacher training. These studies reinforce the importance of continuous professional development, increased resource allocation, and pedagogical innovations to fully realize the curriculum's potential. While the curriculum is designed to be relevant and future-oriented, ongoing reforms and support are necessary to address existing gaps and ensure effective implementation in the Matatag classrooms (webSimilarly, 2022).

Finally, the call for stronger administrative support and clearer policy guidance signifies the role of school leadership and education authorities in sustaining meaningful integration efforts. Institutional backing through resource allocation, professional development programs, and robust monitoring mechanisms is critical to overcoming implementation bottlenecks and ensuring fidelity to curricular goals. Overall, this analysis affirms that while teachers at EFSMES employ effective and research-backed strategies to integrate 21st-century skills into the Matatag classroom, systemic challenges related to resources, time, training, student diversity, and governance must be addressed holistically. Addressing these challenges can create a more enabling environment where innovative pedagogies thrive, ultimately enhancing student outcomes in alignment with the national vision for education. This comprehensive understanding informs policy makers, school leaders, and educators about targeted interventions that can help bridge gaps and build capacity for future-ready education in EFSMES and similar contexts.

Conclusion

The study's findings and the existing literature collectively underscore the Matatag Curriculum's progressive approach to integrating 21st-century skills into elementary education, particularly in the context of Eulalio F. Siazon Memorial Elementary School. The identified strategies—collaborative learning, technology integration, and project-based learning—reflect a deliberate move away from traditional rote memorization towards engaging, student-centered pedagogies that foster critical thinking, communication, creativity, and problem-solving. However, the study also highlights the multifaceted challenges educators face in realizing these curricular aspirations. Resource limitations,

particularly insufficient access to technology and internet connectivity, remain significant barriers that constrain the full implementation of digital and interactive teaching strategies.

Time constraints compound the challenge, as teachers struggle to balance the demands of a packed curriculum while ensuring the meaningful integration of 21st-century competencies (DepEd Order No. 10, s. 2024). Teacher preparedness and confidence also require attention, with many educators expressing the need for enhanced professional development to effectively deliver and assess these complex skills (). Student readiness and engagement issues, especially regarding diverse learning needs, underline the critical importance of inclusive education—a pillar of the Matatag Curriculum (UNESCO, 2025). Administrative and policy support emerged as a crucial factor for the sustainability of this integration. Without robust backing from school leadership and education authorities—ranging from resource allocation to sustained teacher training—the implementation risks being uneven and less effective, as reflected in similar studies on educational reforms in the Philippines.

This study affirms that the Revised Matatag Curriculum has laid a strong foundation for integrating 21st-century skills in elementary education, with teachers employing well-established strategies to meet its goals. However, systemic challenges related to resources, time, training, and support must be addressed comprehensively. Strategic interventions focusing on capacity building, infrastructure improvement, and inclusive pedagogical practices are essential to empower educators and optimize student outcomes. This balanced perspective offers critical insights for policymakers, school leaders, and stakeholders actively working to advance the quality and equity of education through this curriculum.

Furthermore, the current study underscores both the promise and the challenges of integrating 21st-century skills into Matatag classrooms, particularly within the context of Eulalio F. Siazon Memorial Elementary School. Theoretically, the findings reinforce frameworks such as Koehler and Mishra's (2021) Technological Pedagogical Content Knowledge (TPACK) model, affirming that effective integration of 21st-century skills relies on the dynamic interplay of content mastery, pedagogy, and technology. This contributes to the growing body of literature emphasizing the need to align teaching strategies with emerging digital and competency-based learning theories. Practically, the study provides valuable insights for teachers, school administrators, and policymakers by highlighting the need for sustained professional development, equitable resource allocation, and flexible curriculum implementation to foster critical thinking, collaboration, creativity, and problem-solving among learners. It also implies that schools should institutionalize support systems—such as mentoring, capacity-building, and infrastructure investment—to enable teachers to effectively deliver 21st-century education. However, the study's limitations should be acknowledged. The findings are based on responses from a limited number of teachers within a single school, which may restrict the generalizability of results to broader educational contexts. Moreover, the data relied primarily on qualitative insights, which, while rich, may be subject to self-reporting bias. Future research should therefore include a larger and more diverse sample, incorporate quantitative measures to triangulate findings, and explore longitudinal data to assess how integration practices evolve over time. Despite these limitations, the study's implications remain significant: it contributes to ongoing discourse on educational reform and provides actionable directions for enhancing the successful implementation of the Matatag Curriculum, ensuring that learners are equipped with the essential competencies to thrive in the 21st century.

Author's contribution:

The name appear on this paper is the original author of the research paper. He has contributed ideas from the conceptualization of the paper, writing, data gathering and data analysis.

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References

Bellanca, J., & Brandt, R. (2010). *21st-century skills: Rethinking how students learn.* Corwin Press.

Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press.

Department of Education. (2023a). Initial implementation of the Matatag Curriculum: Views of the teachers and principals. *International Journal of Environmental Economics, Commerce and Educational Management, 11*(7). https://doi.org/10.36713/epra17629

Department of Education (2023b*). Matatag curriculum guide*. https://www.deped.gov.ph/matatag-curriculum/

Department of Education (2024). *Matatag curriculum features and priorities*. https://www.deped.gov.ph/wp-content/uploads/DO_s2024_010.pdf

Facione, P. A. (2015). *Critical thinking: What it is and why it counts*. The California Academic Press.

Koehler, M. J., & Mishra, P. (2021). Exploring the interplay of technology, pedagogy, and content knowledge: A model for teacher education. *Educational Technology Research and Development, 69*(1), 121-135.

JIP Publications. (2025). Implementing the Matatag Curriculum: A qualitative study on adaptation and impact. https://jippublication.com/index.php/jip/article/view/345

Johnson, L., & Adams Becker, S. (2022). *The Horizon Report: 2022 Higher Education Edition*. EDUCAUSE.

Lagbao, J. C. U. (2024). Initial implementation of the Matatag Curriculum. *Education and Policy Research Journal, 11*(7). https://doi.org/10.36713/epra17629

National Research Council. (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. National Academies Press.

Partnership for 21st Century Skills. (2011). *Framework for 21st century learning*. Partnership for 21st Century Skills.

Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. John Wiley & Sons.

UNESCO. (2015). *Rethinking education: Towards a global common good*. UNESCO.

UNESCO. (2025). *Equity and inclusion in education: Access to information and technology*. UNESCO Publishing.

World Economic Forum. (2016). *The future of jobs report*. World Economic Forum.