

Suitability of Civic Education Materials in Indonesian Primary Schools for 21st Century Skills

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Abstract

The demands of 21st-century education require learning materials that foster critical thinking, creativity and innovation, communication, and collaboration collectively known as the 4Cs. This study aims to examine the extent to which Civic Education (PKn) textbooks used in Indonesian secondary schools align with these essential competencies. Employing a qualitative content analysis approach, the study analyzed three Grade X PKn textbooks published by the Center for Curriculum and Books (Kemendikbud), Erlangga, and Srikandi Empat. The data sources included the textbook content and qualitative feedback from Civic Education teachers and students in Kerinci Regency, Jambi Province. The analysis focused on identifying the presence and integration of 4C elements across chapters, learning activities, and assessment tasks. Findings reveal that the textbooks published by Kemendikbud and Erlangga demonstrate strong alignment with 21st-century skill requirements, particularly in terms of promoting critical thinking, communication, and collaboration. However, creative and innovative skills were less emphasized. In contrast, the textbook from Srikandi Empat displayed limited integration of the 4Cs, indicating the need for further improvement in aligning its content with contemporary educational demands. This study underscores the importance of continuously evaluating textbook quality to ensure their effectiveness as tools for developing students' future-ready competencies.

Keywords

21st century skills; civic education; content analysis; indonesian curriculum

INTRODUCTION

In recent years, Indonesia has undergone substantial transformation across various sectors, particularly in education. These changes are part of a broader effort to improve the quality of national education and to prepare future generations for the dynamic demands

of the 21st century. Educators are now challenged to adopt more engaging tools and pedagogical approaches to sustain student motivation and participation in learning. Educational development holds true meaning when it contributes directly to the progress of society and national advancement. In this context, human capital development must begin with quality improvements in the education sector (Hakiki et al. 2024).

The goal of education is to foster individuals who exhibit positive character traits spiritually grounded, critical thinkers, and responsible democratic citizens. To meet this goal, the education system must be continually reformed to strengthen human capital capable of adapting to rapid changes. Teachers play a pivotal role in shaping future generations by cultivating students' capacity to thrive in an increasingly complex and competitive world (Badawi, et al., 2024). As O'Dwyer and Atil highlight, teacher educators must demonstrate key personal qualities such as self-confidence, patience, active listening, and quick thinking to effectively guide learners (Compton et al., 2019).

Moreover, a good teacher is not only one who teaches, but also one who remains a lifelong learner. Continuous self-improvement enhances pedagogical effectiveness and prevents monotonous instruction (Cholily et al., 2019). Teachers must be equipped to foster students' ability to think critically, solve problems creatively, collaborate effectively, and communicate clearly (Nurwulandari et al., 2023). Education, therefore, must not only transmit knowledge but also instill values that empower learners to improve their lives and contribute to civilization.

The contemporary learning paradigm is increasingly shaped by the demands of 21st Century Education, often conceptualized through the framework of the "4Cs": critical thinking, creativity, collaboration, and communication (Rati et al., 2023; Simarmata et al., 2020). These competencies have been recognized by the Partnership for 21st Century Learning (P21) as essential for success in a globalized society. As such, education systems must be designed to produce competent, competitive, and adaptive individuals through professionally managed institutions.

Comprehensive education must foster cognitive, affective, and psychomotor development. Teachers bear responsibility for optimizing students' potential across all these domains (Perdhani et al., 2019). While cognitive learning emphasizes the acquisition of knowledge, affective learning shapes attitudes and values, and psychomotor learning enhances practical life skills. As Fisk argues, education should not only equip learners with

skills and knowledge but also guide them in finding and using appropriate learning resources (Lase, 2016).

Within the 21st-century learning context, integrating knowledge with practical application is critical. Students must be trained not only to understand theories but also to apply skills in real-life settings demonstrating innovation, adaptability, and resilience. This aligns with the view of Bedir (in Zain et al., 2023), who suggests that 21st-century education emphasizes active student engagement and critical thinking to meet the demands of an increasingly globalized world.

These challenges are particularly relevant in the context of Civic Education (Pendidikan Kewarganegaraan), which remains a core subject in Indonesia's national curriculum from primary through tertiary education. Civic Education plays a central role in nurturing critical, collaborative, and communicative citizens who can actively contribute to society. In the framework of 21st-century learning, Civic Education must not only promote values and citizenship but also support the development of essential life skills.

To facilitate this goal, high-quality learning resources particularly textbooks are indispensable. Learning resources serve as the foundation for effective knowledge transfer and pedagogical engagement. As Sanjaya (2010) notes, any object or condition in the learning environment that supports instructional goals can be classified as a learning resource. Textbooks are especially influential, shaping not only student learning outcomes but also teacher planning and curriculum delivery (Kristanto & Santoso, 2020).

For textbooks to serve as effective learning tools, they must align with educational objectives and promote the development of 21st-century competencies. According to Çalık (Omer, 2015), textbooks are not merely instructional materials; they are critical tools that support both teaching and independent learning. When designed effectively, textbooks can enhance students' emotional growth, motivation, participation, and reasoning abilities. However, many current textbooks still focus on basic concepts, lacking integration with comprehensive skill development. Thus, it is necessary to conduct a rigorous content analysis of textbooks to evaluate their relevance and potential contributions to skill development in the 21st century.

Considering these considerations, this study aims to analyze the suitability of Civic Education materials used in Indonesian primary schools in meeting the demands of 21st-century learning. This analysis is crucial to ensure that the instructional content not only

meets curricular standards but also equips students with the skills and values necessary for active, critical, and responsible citizenship in a rapidly evolving world.

LITERATURE REVIEW

This study builds upon this theoretical foundation by empirically investigating the outcomes of integrating digital literacy, collaboration, and critical thinking in a sociology education program in Indonesia. The review underscores the pedagogical potential of these three pillars and the need for context-sensitive strategies to implement them effectively in university classrooms. The emergence of 21st-century learning has redefined the goals of education. Rather than focusing solely on knowledge acquisition, education today emphasizes the cultivation of critical competencies necessary for global competitiveness. The Partnership for 21st Century Learning (P21) framework identifies the “4Cs”, critical thinking, creativity, collaboration, and communication as essential skills for learners in the current era (Rati et al., 2023; Simarmata et al., 2020). Bedir, as cited in Zain et al. (2023), emphasizes that 21st-century education fosters active learning environments where students are encouraged to think, question, and engage with real-world problems. In this context, education systems must move beyond rote learning to focus on equipping learners with adaptive, innovative, and interdisciplinary thinking.

Teachers play a vital role in shaping educational experiences that align with the principles of 21st-century learning. According to Compton et al. (2019), effective teacher educators must exhibit qualities such as self-confidence, active listening, and flexibility. These personal attributes are foundational for fostering interactive and reflective learning environments. Similarly, (Cholily, Y. M., et al. 2019) argues that great teachers are lifelong learners those who consistently seek knowledge to improve their instructional practices. Teachers not only transmit knowledge but also model intellectual curiosity and moral integrity. As noted by Nurwulandari et al. (2023), teachers must facilitate the development of soft skills, including problem-solving, creativity, teamwork, and communication all of which are integral to 21st-century success.

Civic Education (Pendidikan Kewarganegaraan or PKn) is a mandatory subject across all levels of education in Indonesia and is essential for developing civic values and national identity. However, within the evolving educational landscape, Civic Education must also adapt to include 21st-century competencies. The aim is to prepare students not

only as loyal citizens but also as active participants in democratic processes with critical awareness and moral reasoning. Thus, the integration of the “4Cs” within Civic Education is imperative to ensure relevance and impact in students' civic engagement.

Textbooks remain one of the most widely used instructional tools in formal education. They shape curriculum delivery, guide classroom interaction, and influence both teaching strategies and learning outcomes. Sanjaya (2010) views textbooks as part of the broader set of learning resources that help optimize educational achievement. Kristanto and Santoso (2020) highlight that textbooks impact not only students' understanding but also teachers' curriculum planning and pedagogical decisions.

Further, as Calik (Omer, 2015) asserts, textbooks are “supplementary instructional materials” that serve both as teaching aids and as independent learning resources. Their influence extends beyond content delivery to shaping students' emotional engagement, critical reasoning, and participatory attitudes. However, many textbooks currently used in classrooms primarily focus on theoretical concepts and lack integration with practical, real-world skills. This gap underlines the need for a critical analysis of textbook content, particularly regarding its alignment with 21st-century skill development.

Educational quality must be evaluated across cognitive, affective, and psychomotor domains. Perdhani et al. (2019) emphasize that teachers are responsible for developing these three aspects holistically. The cognitive domain supports knowledge acquisition; the affective domain enhances attitudes and emotional intelligence, while the psychomotor domain develops practical competencies. Fisk (in Lase, 2016) posits that modern education must not only impart knowledge and skills but also equip learners with strategies to access and apply new learning in dynamic contexts.

This multi-dimensional approach aligns with the broader goals of 21st-century education, where integration of knowledge and real-world application is essential. Education, therefore, should not only be content-driven but also competency-oriented, preparing learners to adapt, innovate, and contribute meaningfully to society.

While numerous studies emphasize the importance of integrating 21st-century competencies into educational practice, there is limited research focusing specifically on the alignment of Civic Education textbooks in Indonesian primary schools with the demands of 21st-century skills. This study addresses that gap by critically analyzing the content of Civic Education materials to assess their relevance and effectiveness in fostering

critical, creative, collaborative, and communicative learners. Such evaluation is necessary to ensure that educational resources are not only aligned with curriculum standards but also responsive to the global competency framework required in the modern era.

METHOD

This study employed a qualitative research design with a content analysis method to investigate the alignment of Civic Education (PKn) textbooks with 21st-century skill demands. Content analysis was selected as it enables the researcher to explore in-depth the messages and values embedded in documents, particularly textbooks used as primary learning sources in schools. The focus of the analysis was on identifying the extent to which the learning materials support the development of core 21st-century competencies, including critical thinking, creativity and innovation, communication, and collaboration. These skills, commonly referred to as the 4Cs, are essential for students to thrive in a rapidly changing global context.

The research sample consisted of three Grade X Civic Education textbooks published by: (1) the Center for Curriculum and Books, Ministry of Education and Culture of Indonesia (Kemendikbud), (2) Erlangga Publishing, and (3) Srikandi Empat Publishing. In addition to the textbooks, the study involved human informants comprising six Civic Education teachers and eighteen Grade X students from public high schools in Kerinci Regency, Jambi Province, Indonesia. Participants were selected through purposive sampling to ensure that the respondents had sufficient experience with the textbooks under review and were familiar with the principles of 21st-century learning.

Data analysis was conducted through three key procedures. First, content analysis was applied by coding the presence of the 4C elements in each chapter of the textbooks. Second, the data were categorized using qualitative criteria (very good, good, sufficient, and less sufficient) based on how comprehensively the textbooks incorporated 21st-century skills into their narratives, learning activities, and assessments. Third, the analysis was supported by triangulating findings with data from interviews with teachers and students. This triangulation enhanced the credibility, confirmability, and dependability of the study, ensuring that the interpretations were well-grounded and reflective of classroom realities.

RESULT AND DISCUSSION

Result

This study analyzed three Civic Education (PKn) textbooks used in Indonesian senior high schools published by the Pusat Kurikulum dan Perbukuan, Erlangga, and Srikandi Empat to evaluate their alignment with 21st-century learning competencies. The assessment focused on the four core skills identified by the Partnership for 21st Century Learning (P21): critical thinking, creativity and innovation, communication, and collaboration.

The analysis was conducted by collecting evaluations from experienced teachers, who assessed each textbook across seven chapters. The findings are summarized in the following tables.

Tabel 1. Chapter-wise Assessment of 21st-Century Learning Features in Each Textbook

Chapter	Pusat Kurikulum	Erlangga	Srikandi Empat
I	Good	Good	Good
II	Very Good	Good	Good
III	Good	Very Good	Good
IV	Good	Good	Fair
V	Good	Very Good	Fair
VI	Good	Very Good	Fair
VII	Good	Fair	Fair

The Pusat Kurikulum textbook consistently demonstrated good alignment across chapters, with Chapter II evaluated as “very good” for incorporating all four 21st-century skills. The Erlangga textbook also showed strong integration, with three chapters rated “very good,” indicating a progressive incorporation of creativity and collaboration. However, Srikandi Empat showed a weaker performance, with most chapters rated only “fair,” especially in the domains of creativity, communication, and collaboration.

Tabel 2. Summary of 21st-Century Skill Representation in Each Textbook

Publisher	Critical Thinking	Creativity & Innovation	Communication	Collaboration	Overall Evaluation
Pusat Kurikulum	Strong	Moderate	Moderate	Good	Good
Erlangga	Strong	Good	Good	Very Good	Good
Srikandi Empat	Moderate	Fair	Fair	Fair	Fair

The overall results indicate that textbooks published by Pusat Kurikulum and Erlangga are more successful in embedding the principles of 21st-century education. These books provide learning tasks and problem-solving activities that promote student participation, collaborative work, and the development of higher-order thinking skills.

Notably, the Erlangga textbook excels in collaborative elements, while the Pusat Kurikulum version emphasizes critical thinking consistently.

In contrast, the Srikandi Empat textbook shows limited integration of these competencies. Many of its tasks do not adequately support idea generation, communication, or teamwork. This limitation may present a challenge for both teachers and students in developing critical 21st-century skills.

Discussion

This study investigated the alignment of Civic Education (PKn) textbooks used in Indonesian primary schools with 21st-century learning skill demands. The research focused on three textbooks: (1) the official textbook published by the Pusat Kurikulum dan Perbukuan Indonesia (Kemendikbud), (2) the Erlangga textbook, and (3) the Srikandi Empat textbook. Each textbook consists of seven chapters covering key topics in civic education, ranging from constitutional principles to national integration and regional governance.

The analysis assessed the inclusion of the four essential 21st-century learning skills critical thinking, creativity and innovation, communication, and collaboration commonly referred to as the 4Cs (Partnership for 21st Century Learning, 2019).

Tabel 3. 21st-century learning skills

Textbook Publisher	Chapter Themes
Kemendikbud	Values of Pancasila, 1945 Constitution, State Institutions, Central-Regional Relations, National Integration, National Threats, Archipelagic Outlook
Erlangga	Similar themes with minor variation in chapter focus and terminology
Srikandi Empat	Slight content restructuring but consistent with national curriculum guidelines

Tabel 4. Distribution of 21st-Century Skills Across Textbook Chapters

Chapter	Kemendikbud	Erlangga	Srikandi Empat
I	Critical Thinking, Communication, Collaboration	Critical Thinking, Communication, Collaboration	Critical Thinking, Communication, Collaboration
II	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Communication, Collaboration	Critical Thinking, Communication, Collaboration
III	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Creativity, Collaboration
IV	Critical Thinking, Communication, Collaboration	Critical Thinking, Communication, Collaboration	Critical Thinking, Creativity

Chapter	Kemendikbud	Erlangga	Srikandi Empat
V	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Collaboration
VI	Critical Thinking, Communication, Collaboration	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Creativity
VII	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Creativity, Communication, Collaboration	Critical Thinking, Creativity

From the table above, it is evident that Kemendikbud and Erlangga textbooks comprehensively address 21st-century competencies across all chapters. In contrast, the Srikandi Empat textbook shows inconsistencies, particularly in the integration of communication and collaboration skills. This finding highlight that while all three textbooks incorporate 21st-century skills to some degree, only the Kemendikbud and Erlangga books achieve a consistent and structured integration of all 4Cs. The Srikandi Empat textbook, while including critical thinking and some elements of creativity, lacks a balanced approach to communication and collaboration.

These findings are aligned with the argument by Barus (2024), who asserts that 21st-century learning goes beyond content mastery to include applicable skills necessary for facing global challenges. Similarly, Daeli et al. (2025) stress the urgency of revitalizing education systems to produce competitive and skilled individuals.

Relevance of the 4Cs in Civic Education Textbooks

1. Critical Thinking is crucial in analyzing constitutional structures, understanding governmental functions, and forming well-reasoned civic opinions (Marwa et al., 2024; Thornhill-Miller et al., 2023).
2. Creativity and Innovation enable students to propose new solutions in democratic participation and problem-solving in civic life (Johnson & Johnson, 2024).
3. Communication supports the articulation of ideas in civic discourse, debates, and collaborative projects (Mantau & Talango, 2023).
4. Collaboration promotes teamwork, mutual respect, and shared responsibility, which are essential in building democratic and pluralistic societies (Anjani et al., 2024; Mutohhari et al., 2021).

As noted by Gunawan et al. (2022), the implementation of 4C skills significantly impacts student success both in academic and real-world contexts. Therefore, textbooks should serve not only as content guides but also as tools for activating these competencies. Overall, the Kemendikbud and Erlangga textbooks were classified as very good in supporting 21st-century skill development. These books include critical thinking prompts, collaborative tasks, creative project-based learning, and communication practices embedded within exercises and assessments. Meanwhile, the Srikandi Empat textbook was rated as good but requires improvement. While it features some 21st-century elements, it lacks systematic incorporation of all 4Cs in each chapter. This can limit the opportunity for teachers and students to engage in comprehensive, future-oriented learning experiences. The evaluation confirms that Civic Education textbooks in Indonesia vary in their alignment with 21st-century skill frameworks. Textbooks from Kemendikbud and Erlangga offer robust support for implementing 4C competencies, while Srikandi Empat presents gaps that should be addressed in future revisions. Educators are encouraged to supplement these materials with innovative strategies to ensure that students are well-equipped to become responsible and capable citizens in the 21st century.

CONCLUSION

This study evaluated the extent to which Civic Education (PKn) textbooks used in Indonesian high schools align with the demands of 21st-century learning. Through content analysis of three different textbooks published by the Pusat Kurikulum dan Perbukuan Indonesia (Kemendikbud), Erlangga, and Srikandi Empat the research revealed important insights regarding the integration of 4C skills: critical thinking, creativity and innovation, communication, and collaboration. The findings demonstrate that textbooks published by Kemendikbud and Erlangga successfully integrate the core components of 21st-century learning across all chapters. These materials provide students with opportunities to analyze, communicate, collaborate, and innovate through structured activities, tasks, and assessments. In contrast, the textbook from Srikandi Empat shows limited and inconsistent incorporation of communication and collaboration skills, which are crucial in fostering holistic civic competence. These results underscore the essential role of textbooks as both instructional tools and instruments for cultivating future-ready skills. Textbooks that systematically embed 4C competencies are better positioned to support student

engagement, independent thinking, and collaborative problem-solving key qualities for navigating the demands of a globalized, knowledge-based society. Considering these findings, it is recommended that textbook authors and curriculum developers ensure the comprehensive integration of 21st-century learning principles into civic education materials. Furthermore, educators are encouraged to critically assess and adapt available textbooks to create learning environments that are not only informative but also transformative in preparing students as active, critical, and responsible citizens.

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