
EMPOWERING CIVICS EDUCATION: A DESIGN THINKING FOR DEEP LEARNING IN THE 21ST CENTURY

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Abstract

The problem in Civics Education learning often lies in the gap between the material delivered in the classroom and the realities experienced by learners in their daily lives. The introduction of Indonesia's new curriculum, namely Deep Learning, presents new challenges for educators in teaching Civics Education. Therefore, the purpose of this study is to explore the concepts of Design Thinking and Deep Learning comprehensively and to offer innovative contributions to Civics Education learning through the application of the Design Thinking approach in the learning process. This research employs a qualitative method utilizing a literature study approach. Data collection was conducted an examination of books, journals, articles, and other credible sources. Data analysis was carried out in three stages: data reduction, data display, and conclusion drawing. The results of the study show that a Design Thinking-based learning strategy for Civics Education using the Double Diamond Process Model is an innovative step to encourage the realization of Deep Learning that is relevant to the challenges of 21st-century learning. This model actively engages learners in the process of critical and creative thinking through four main stages: Discover, Define, Develop, and Deliver. By promoting a deep and reflective understanding of civic issues, this approach aligns with the principles of Deep Learning, which underscore the importance of meaningful, joyful, and mindful learning. Furthermore, it effectively cultivates learners into critical, creative, and responsible citizens in the global context.

Keywords: civic education, deep learning, design thinking

Introduction

The curriculum is a fundamental element of a nation's educational system. As both a plan and a guideline for the learning process, the curriculum not only reflects national educational goals but also embodies the cultural, social, and temporal values of society. According to [Ornstein & Hunkins \(1993\)](#), curriculum serves as a structured framework that shapes educational experiences in line with societal expectations and learner development. Furthermore, studies by [Marsh & Willis \(1995\)](#) emphasize that curriculum reform is a continuous response to cultural shifts, technological advancements, and global demands. Thus, the dynamic nature of education requires that curriculum development remain responsive to the evolving needs of society and contemporary global challenges.

In Indonesia, curriculum changes frequently follow shifts in government, underscoring the curriculum's adaptive nature in responding to evolving societal needs. [Giddens \(2006\)](#) theorizes that social structures including politics, economy, and culture are dynamically interconnected, and their transformation often drives broader social changes. In line with this, [Inglehart & Welzel \(2005\)](#) argue

that modernization brings about shifts in societal values, which in turn affect key institutions such as education. Reflecting these theoretical perspectives, historical developments in Indonesia show that the national curriculum has undergone at least ten major revisions since 1945, namely in 1947, 1952, 1964, 1968, 1975, 1984, 1994, 2004, 2006, and most recently, the 2013 Curriculum (Ananda & Hudaidah, 2021). These empirical findings support the view that curriculum reform is both a reflection of and a response to broader social, political, and cultural transformations.

In line with the progress of the times, the Indonesian curriculum has undergone continuous changes primarily aimed at improving the quality of national education. As Tyler (2013) emphasizes in his classic curriculum development theory, curriculum is a structured plan of learning that must continuously evolve to meet the needs of a changing society. Additionally, Ornstein and Hunkins (1993) argue that curriculum serves as both a reflection of and a response to the socio-cultural and political realities of a nation. Thus, curriculum reform in Indonesia can be seen as an innovative strategy to align educational practices with contemporary societal needs and global standards. The most recent curriculum reform is embodied in the Merdeka Belajar–Kampus Merdeka (MBKM) initiative, which reflects a shift toward a more flexible, student-centered, and competency-based learning model. “Merdeka Belajar” promotes freedom in thinking and innovation at the school level, while “Kampus Merdeka” extends this philosophy to higher education, offering broader learning autonomy. The MBKM initiative aligns with the development of Profil Pelajar Pancasila, which reflects Indonesia’s foundational values and is aimed at forming holistic and globally competitive graduates. The policy is grounded in Law No. 12 of 2012 and adopts the Outcome-Based Education (OBE) framework an approach widely supported in curriculum development literature (Spady, 1994). Recent studies, such as those by Vhalery et al. (2022) further show how the implementation of MBKM has responded to social dynamics and technological progress, demonstrating the curriculum's adaptability in real educational contexts.

However, a recent shift in curriculum policy indicates a transition from the MBKM curriculum to a new framework known as the Deep Learning Curriculum. This transition reflects what Brown et al. (1999) describe as a move toward learner-centered education, where understanding is constructed through meaningful engagement rather than rote memorization.¹ Deep Learning, in this context, emphasizes the development of higher-order thinking skills, in line with Bloom’s Taxonomy, which categorizes learning outcomes from basic recall to complex evaluation and creation (Anderson et al., 2001). At its core, the Deep Learning Curriculum integrates several essential components: deep conceptual understanding, active and collaborative learning, inquiry-based instruction, and cooperative strategies, elements that align with constructivist learning theories proposed (Vygotsky, 1978). This curriculum model aims to foster critical thinking, creativity, and adaptability, equipping learners to navigate the complexities of a rapidly evolving global landscape. Recent studies support this pedagogical shift. For example, Muvid (2024) found that the implementation of the Deep Learning Curriculum significantly enhanced students' engagement, problem-solving abilities, and conceptual understanding, particularly in STEM-related subjects. Such findings underscore the relevance and effectiveness of this innovation in modern educational settings.

Effective learning in the context of the 21st century demands a deeper and more comprehensive approach to the learning process of students. The constructivist theories of Piaget (2005) and Vygotsky (1978) emphasize that knowledge is not transmitted passively but is actively constructed by individuals through interaction with their environment and reflection on their experiences. Within this framework, the Deep Learning approach emerges as a significant innovation in contemporary education, one that not only stresses conceptual mastery but also fosters the development of attitudes

and critical thinking skills (Fullan et al., 2018). Three core elements form the pillars of Deep Learning: Mindful Learning, Meaningful Learning, and Joyful Learning. Mindful Learning encourages learners to be fully present and conscious in the learning process, enhancing metacognitive awareness and reflective thinking about what they learn (Wergin, 2019). Meaningful Learning emphasizes the connection between new information and prior experiences, values, and existing knowledge structures, thus creating deeper and more sustainable understanding. Meanwhile, Joyful Learning fosters a positive, pressure-free classroom environment that stimulates intrinsic motivation, as underscored by Rogers & Freiberg (1994) humanistic approach, which places positive emotional experiences at the heart of the learning process. The findings of a study by Putri et al. (2024) reinforce the importance of these three elements in classroom practice. Their research indicates that integrating Mindful, Meaningful, and Joyful Learning into instruction significantly improves student engagement, material comprehension, and learning satisfaction. Therefore, developing a curriculum centered on Deep Learning becomes a transformational strategy for cultivating learners who are critical thinkers, innovative problem-solvers, and adaptive to the demands of a rapidly changing world.

The implementation of a new curriculum framework has significantly shaped various aspects of the learning process, particularly in the teaching of Civic Education. As emphasized by curriculum theorists such as Kaelan (2014), Civic Education is central to fostering democratic values and civic responsibility within a pluralistic society. It serves not only as a means of transmitting knowledge, but also as a vehicle for cultivating national identity and social cohesion. According to Kandia (2023), the current curriculum has reinforced the strategic role of Civic Education by emphasizing the formation of learners who are religious, knowledgeable, competent, and democratic. These findings reflect the broader curriculum goals that aim to produce a generation capable of contributing to a dignified and morally grounded nation. Recent studies, such as that by Suryadi & Jasiah (2023) have emphasized that curriculum transformation significantly enhances the relevance and contextualization of Civic Education content, enabling students to engage more actively with real-world social and political issues. These findings suggest that a curriculum responsive to civic needs can promote deeper civic awareness, participatory behavior, and the internalization of democratic values among learners.

The challenges encountered by educators in the teaching of Civic Education have shown persistent patterns over time. Instruction continues to rely heavily on cognitive dimensions, predominantly delivered through traditional, teacher-centered methodologies where the teacher serves as the primary transmitter of knowledge and students remain passive recipients. This pedagogical orientation creates a disconnect between the content taught in classrooms and the lived realities students face outside of school. As Dewey (1986) asserted in his experiential learning theory, education should be rooted in meaningful experiences that connect learning to real-world contexts. Without this connection, the curriculum fails to nurture critical and participatory citizenship an essential aim of Civic Education. Supporting this view, a study by Wahyuni and Muhibbin (2024) found that the lack of contextualized and student-centered learning in Civic Education results in limited engagement, reduced critical thinking, and weakened democratic awareness among students.

This condition underlines a critical concern the repeated failure to meet national education objectives due to the pedagogical stagnation often observed in Civic Education instruction. Consequently, the shift toward a new curriculum framework necessitates pedagogical innovation. Educators are expected to redesign their teaching approaches to better align with the curriculum's direction, which emphasizes active, inquiry-based, and value-oriented learning. As noted by Bruner (1974), successful curriculum implementation hinges on how well teaching practices integrate learning theories with student-centered strategies. Naibaho (2023) similarly emphasizes that curriculum

effectiveness is largely determined by the alignment between instructional strategies and learners' needs in dynamic contexts.

Teaching strategies, therefore, must be viewed not merely as plans but as purposeful and systematic frameworks that guide the entire teaching and learning process. These strategies involve selecting appropriate methods and utilizing diverse resources to facilitate active student engagement and learning outcomes. According to [Joyce and Calhoun \(2024\)](#) effective strategies are those that not only address instructional goals but are also adaptable to the learning environment and responsive to students' developmental stages. [Siregar \(2021\)](#) further explains that strategic instructional design should begin with the articulation of specific, measurable learning objectives. Such clarity ensures that teaching methods, learning tools, and assessment practices all function in synergy to achieve desired educational outcomes. Importantly, research by [Widiyanto \(2017\)](#) reinforces that flexible and diversified teaching strategies are crucial for addressing the multifaceted goals of Civic Education, particularly in preparing learners for active and responsible citizenship in a pluralistic society.

Effective teaching requires the use of appropriate strategies that align with learners' needs and educational goals. According to [Freiberg & Driscoll \(2005\)](#), teaching strategies are purposeful actions implemented by educators to achieve specific learning objectives across various educational levels. These strategies should be context-sensitive and responsive to the characteristics of learners. Supporting this view, a study by [Sabbagh \(2021\)](#), highlights that adaptive e-learning environments, which tailor instructional content to students' learning styles, significantly enhance engagement and learning outcomes. Meanwhile, [Gerlach et al \(1980\)](#) define a teaching strategy as a structured plan that guides the delivery of instructional content within a particular learning environment. This includes determining the characteristics, scope, and sequencing of activities that aim to optimize students' learning experiences. Furthermore, it is important to highlight four key components in designing a strategic teaching approach, the identification and clarification of desired learning outcomes, the assessment of learners' needs, the incorporation of community values, and the consideration of contextual factors that influence the teaching and learning process ([Siregar, 2021](#)).

An innovative pedagogical strategy increasingly recognized in Civic Education instruction is the integration of Design Thinking. Rooted in the works of [Brown \(2009\)](#) and [Liedtka & Ogilvie \(2019\)](#) Design Thinking is defined as a user-centered, problem-solving approach that emphasizes empathy, ideation, prototyping, and testing, allowing learners to design meaningful and contextually relevant solutions. This approach enables students to address complex civic issues while enhancing creativity, empathy, and critical thinking ([Razzouk & Shute, 2012](#)). The [Direktorat Pembelajaran dan Kemahasiswaan \(2022\)](#) further underscores that Design Thinking provides a systematic process that fosters the development of innovative mindsets and problem-solving skills aligned with real-world needs. A particularly relevant model for Civic Education is the Double Diamond process, introduced by the Design Council UK. This model comprises four iterative stages, Discover, Define, Develop, and Deliver, which enable students to deeply explore civic issues, define problems based on stakeholder needs, generate innovative solutions, and implement them effectively. [Binus \(2021\)](#) affirms that this structured thinking model not only aligns with project-based learning (PjBL) but also fosters meaningful learning experiences through iterative design cycles.

Empirical studies support the positive impact of Design Thinking in education. [Fanjalu \(2023\)](#) found that applying Design Thinking in Civic Education enhances student engagement, promotes collaborative learning, and cultivates creative problem-solving abilities. Similarly, [Sanjani et al. \(2024\)](#) reported that students exposed to Design Thinking-based instruction demonstrated improved civic competencies, such as active participation, democratic decision-making, and empathy-driven dialogue.

Moreover, Design Thinking is recognized as a core strategy within the Deep Learning framework. According to the Academic Manuscript on Deep Learning [Kemendikdasmen \(2025\)](#) effective deep learning practices involve authentic, inquiry-based, and collaborative experiences grounded in real-world applications. The document highlights Design Thinking, alongside other strategies like Inquiry-Based Learning (IBL), Project-Based Learning (PjBL), Problem-Based Learning (PBL), STEAM, and SETS, as transformative approaches that facilitate higher-order thinking, learner autonomy, and the development of adaptive, future-ready graduates. Based on the explanation above, this study aims to explore in depth: (1) the concept of Design Thinking, (2) the concept of Deep Learning, and (3) the design of a Deep Learning-based Civic Education (PKn) teaching strategy as an effort to promote deep learning. This design is implemented through the application of the Design Thinking approach in the learning process, which is expected to enhance students' active engagement, foster critical and creative thinking, and align with the direction of Indonesia's new curriculum policy that emphasizes deep learning. Therefore, this study is expected to offer an alternative solution to the challenges faced in Civic Education instruction during the current era of educational transformation.

Literature Review

This literature review explores three key components relevant to the development of Civic Education using innovative learning strategies: Civic Education, Design Thinking, and Deep Learning. These topics are chosen because they represent essential frameworks that support the creation of active, critical, and collaborative citizenship competencies, which are vital in the 21st century. By understanding the theoretical underpinnings and research processes associated with each of these concepts, this study aims to strengthen the design of learning models that encourage higher-order thinking, democratic engagement, and creative problem-solving among students.

Civic education is a subject that focuses on shaping citizens who understand and are capable of fulfilling their rights and responsibilities to become intelligent, skilled, and character-driven Indonesian citizens, in accordance with the principles of Pancasila and the 1945 Constitution. Civic Education plays a crucial role in developing citizens with strong character and intellectual integrity. It is a dynamic subject that continuously evolves in response to societal changes, and its content is influenced by various elements (Japar, 2020). According to Kaelan & Zubaidi (2010) the study of Civic Education is rooted in various academic disciplines. Therefore, its examination and development require contributions from multiple fields of knowledge, such as political science, law, philosophy, history, economics, public administration, and cultural studies. Based on this perspective, Civic Education can be classified within the domain of social sciences.

Jurisdictionally, Civic Education aims to shape university students as learners who possess a strong sense of nationalism and deep love for their homeland. Terminologically, Civic Education is an educational program primarily focused on political democracy, which is then enriched by various other sources of knowledge, including the positive influences of schooling, community environments, and parental roles. All of these elements are integrated to train students to think critically and analytically, as well as to act and behave democratically in preparation for civic life grounded in the principles of Pancasila and the 1945 Constitution (Nurwardani et al., 2016).

Design thinking, effective teaching requires the use of appropriate strategies that align with learners' needs and educational goals. According to [Freiberg & Driscoll \(2005\)](#), teaching strategies are purposeful actions implemented by educators to achieve specific learning objectives across various educational levels. These strategies should be context-sensitive and responsive to the characteristics of learners. Supporting this view, a study by [Sabbagh \(2021\)](#), highlights that adaptive e-learning

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One such approach is Design Thinking. In the context of education, Design Thinking serves as both a mindset and a methodology for facilitating learning, fostering collaboration, and addressing complex problems. It is grounded in a structured process that involves identifying problems, collecting relevant data, generating possible solutions, iterating and refining ideas, and testing the outcomes. This flexible approach can be implemented across diverse subjects and learner profiles through project-based learning initiatives designed by educators, thereby fostering innovative and student-centered learning experiences (Sokrates Empowering School, 2019).

The Double Diamond process model is recognized as a suitable framework for implementing Design Thinking in Civic Education. This model is particularly relevant due to its structured approach to problem-solving that emphasizes user-centered solutions. The Double Diamond framework comprises four key phases: Discover, Define, Develop, and Deliver. As part of the broader Design Thinking methodology, it facilitates innovative, project-based learning and enables students to engage deeply with real-world issues by focusing on user experiences (Binus, 2021). Empirical studies have demonstrated that when effectively incorporated into teaching practices, Design Thinking serves as a powerful strategy for enhancing Civic Education. It fosters sustained student engagement throughout the learning process while promoting creativity and innovation through hands-on, interactive activities conducted in the classroom (Fanjalu, 2023).

Deep learning, this transition reflects what Brown et al. (1999) describe as a move toward learner-centered education, where understanding is constructed through meaningful engagement rather than rote memorization. Deep Learning, in this context, emphasizes the development of higher-order thinking skills, in line with Bloom's Taxonomy, which categorizes learning outcomes from basic recall to complex evaluation and creation (Anderson et al., 2001). At its core, the Deep Learning Curriculum integrates several essential components: deep conceptual understanding, active and collaborative learning, inquiry-based instruction, and cooperative strategies, elements that align with constructivist learning theories proposed (Vygotsky, 1978). This curriculum model aims to foster critical thinking, creativity, and adaptability, equipping learners to navigate the complexities of a rapidly evolving global landscape. Recent studies support this pedagogical shift. For example, Muvid (2024) found that the implementation of the Deep Learning Curriculum significantly enhanced students' engagement, problem-solving abilities, and conceptual understanding, particularly in STEM-related subjects. Such findings underscore the relevance and effectiveness of this innovation in modern educational settings.

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Methodology

Research design and approach of the study

This study employs a qualitative method with a literature review approach (library research), involving data collection through various relevant literatures, such as reading, note-taking, and managing information from reliable sources (Hadi et al., 2021; Hardani et al., 2020). This approach was chosen as it provides a solid theoretical foundation and enriches the researcher's understanding of the issues being examined.

Data collection and analysis

The data for this study were obtained from primary and secondary sources. Primary sources include three main references: (1) the concept of Deep Learning as outlined by the Ministry of Education and Culture Kemendikdasmen (2025); (2) the theory of Design Thinking developed by Binus (2021), Nessler (2016), and Razzouk and Shute (2012); and (3) learning strategies based on Design Thinking proposed by Sinaga et al. (2023). Secondary data were collected from scholarly journals, books, articles, and other academic publications.

The data analysis in this study was conducted using the technique developed by Miles and Huberman, which includes three main stages: data reduction, data display, verification. (1) Data Reduction: Relevant information from the collected literature was selected, coded, and categorized according to the research objectives. This step involved eliminating irrelevant or redundant data while emphasizing important patterns and themes. (2) Data Display: The reduced data were organized systematically into tables, thematic charts, and matrices to facilitate a clearer understanding and comparison of key findings. (3) Conclusion Drawing and Verification: Final conclusions were drawn through a careful interpretation of the displayed data. To ensure the validity and consistency of the findings, triangulation was employed by cross-referencing multiple sources, concepts, and theoretical frameworks. The researcher also engaged in member checking, discussing interpretations with peer reviewers to minimize bias and enhance trustworthiness (Creswell, 2013).

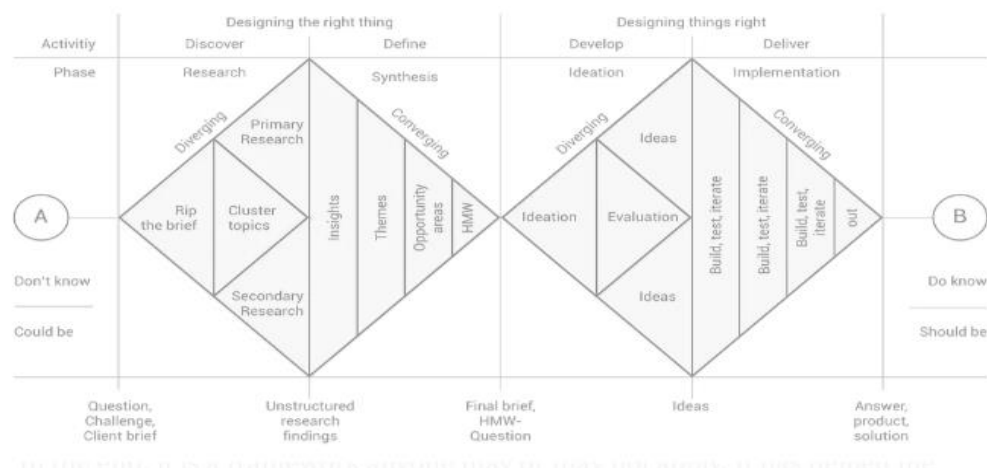
Results

The concept of design thinking

Design Thinking in education is a thinking approach and method used for learning, collaboration, and problem-solving. This process follows a structured framework that includes identifying challenges, gathering information, developing potential solutions, refining ideas, and testing solutions. This approach can be flexibly applied to various subjects and learners through learning projects designed by educators, thereby creating an innovative learning experience (Sokrates Empowering School, 2019).

Design thinking is a systematic approach consisting of a series of thinking stages aimed at creating innovations that align with real needs. This approach serves as a framework that guides the process of creating creative and innovative solutions, while focusing on user needs (Direktorat Pembelajaran dan Kemahasiswaan, 2022). This method has gained widespread attention due to its structured steps in developing products and services that are relevant to consumer desires. Products and services developed through this approach become essential elements in strengthening the competitiveness of a business. As a result, many large and well-known companies implement design thinking to enhance the superiority of their products and services. The use of design thinking has also been proven to improve the quality of products and services, assist industries in identifying real problems, and encourage the development of applicable skills and innovations in the workforce (Razzouk & Shute, 2012). The design thinking process model that is suitable for Civic Education learning is the Double Diamond Process Model. This model is considered relevant as it provides a structured thinking approach to finding solutions that are centered on user needs. The Double Diamond Process Model is one of the frameworks in design thinking that supports project-based learning in an innovative manner, offering a learning experience that involves an in-depth understanding of the user's experience (Binus, 2021). Below is an illustration that demonstrates the design thinking process model.

Figure 1. Model design thinking-source-Nessler (2016)



The Double Diamond Process Model framework is one of the approaches in design thinking designed to guide the innovation process based on user experience. This model was first introduced by the Design Council in 2004 (Tschimmel, 2012). In practice, this framework offers two main thinking patterns (Binus, 2021), namely:

- **Diverge:** The divergent thinking pattern encourages designers to broaden their perspectives, open up various possibilities, and explore different viewpoints to gain a comprehensive understanding of the problem.
- **Converge:** The convergent thinking pattern focuses on the process of filtering and selecting ideas. The goal is to filter, prioritize, and formulate the most feasible solutions to implement from the many ideas generated.

The Four Main Phases in the Design Thinking Double Diamond Process Model (Binus, 2021; Tschimmel, 2012) namely:

- Discover: The initial phase aimed at identifying and thoroughly understanding the problem. This stage relies on a divergent approach to explore various perspectives through empirical research and literature review. Activities include gathering insights, needs, trends, and relevant opportunities to develop a deep understanding of the user's challenges.
- Define: The second phase aims to synthesize the findings from the Discover phase to formulate the core problem to be addressed. This phase is convergent in nature, narrowing the focus so that the designer can clearly define the primary challenge as the basis for developing solutions.
- Develop: The ideation phase where various alternative solutions begin to be developed. With a divergent approach, this phase encourages the generation of innovative ideas across disciplines, including the creation of sketches, prototypes, or detailed project plans. This process is still supported by empirical research and literature to ensure the solution aligns with user needs.
- Deliver: The final phase, which is convergent, focuses on refining and implementing the solution. The designed project or product is tested, improved, and prepared for launch or real-world application. This phase serves as the final validation of the effectiveness of the developed solution.

In the Design Thinking Double Diamond Process Model framework, the four main phases (Discover, Define, Develop, and Deliver) are divided into two major thinking processes (Binus, 2021), namely:

- Doing the Right Thing (discover dan define): This phase focuses on identifying and articulating relevant problems to ensure clarity in the direction and objectives of the problem-solving process.
- Doing Things Right (develop dan deliver): Once the core issue has been clearly defined, the next step is to design and implement solutions effectively, aligning with the identified needs.

It can thus be concluded that Design Thinking is a systematic and structured user-centered approach to solving problems creatively and innovatively through the stages of Discover, Define, Develop, and Deliver. The Double Diamond Process Model serves as an ideal conceptual framework as it integrates two core processes, Doing the Right Thing and Doing Things Right, each focusing respectively on problem identification and the creation of effective, user-driven solutions. Consequently, Design Thinking offers an adaptive, participatory, and relevant learning strategy to equip students with the necessary competencies to face 21st-century challenges

The concept of curriculum deep learning

This transition reflects what Brown et al. (1999) describe as a move toward learner-centered education, where understanding is constructed through meaningful engagement rather than rote memorization. Deep Learning, in this context, emphasizes the development of higher-order thinking skills, in line with Bloom's Taxonomy, which categorizes learning outcomes from basic recall to complex evaluation and creation (Anderson et al. (2001). At its core, the Deep Learning Curriculum integrates several essential components: deep conceptual understanding, active and collaborative learning, inquiry-based instruction, and cooperative strategies, elements that align with constructivist

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Based on the study conducted by Putri et al. (2024), three key elements were identified: Mindful Learning, which requires students to be consciously aware of their own learning processes and to derive meaning from each lesson; Meaningful Learning, which emphasizes the connection of learning content with students' personal experiences and broader conceptual frameworks; and Joyful Learning, which promotes an enjoyable learning environment that reduces academic pressure and enhances students' intrinsic motivation. These elements represent core components of deep learning and highlight their relevance to the context of education in Indonesia.

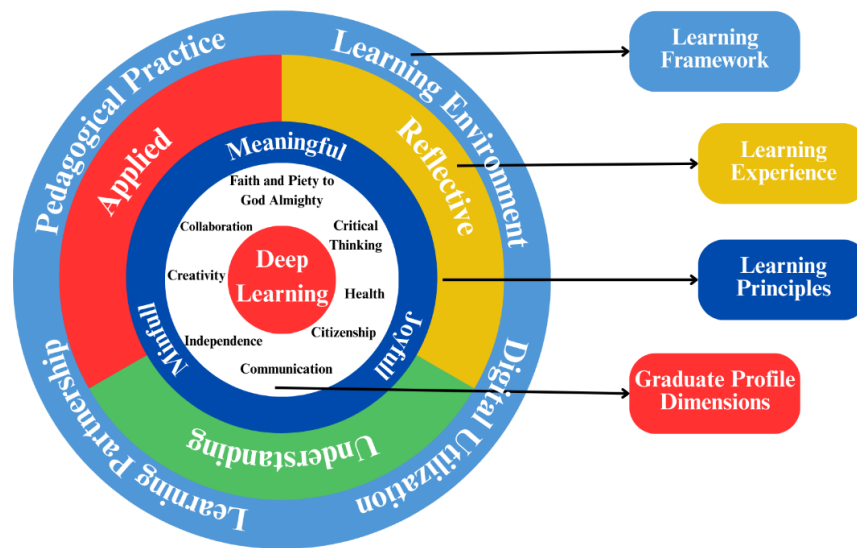
Table 1. *The core elements of deep learning*

Elements	Description	Potential Application
Mindfull Learning	An approach that emphasizes students' self-awareness of their learning processes, creating a responsive environment tailored to individual needs.	Can enhance student motivation through personalized learning styles, though it requires intensive teacher training and pedagogical adaptation.
Meaningfull Learning	A learning process that connects knowledge with students' real-life experiences, making content relevant to their everyday lives.	Offers opportunities for students to perceive the practical benefits of learning, but demands a more contextualized and flexible curriculum.
Joyfull Learning	A pleasant and emotionally engaging learning approach aimed at reducing stress and increasing students' emotional involvement in the subject matter.	Particularly effective in reducing test anxiety; however, creating an enjoyable learning atmosphere remains challenging in schools with limited resources.

Deep Learning is an educational approach that prioritizes the creation of a learning environment that is conscious, meaningful, and joyful. It holistically engages students' cognitive, emotional, spiritual, and physical dimensions in an integrated manner. The Deep Learning framework encompasses four

core elements: (1) graduate profile dimensions, (2) learning principles, (3) learning experiences, and (4) learning structures. The central focus of this approach is the achievement of eight graduate profile dimensions, namely: (1) faith in and devotion to God Almighty, (2) civic character, (3) critical thinking skills, (4) creativity, (5) collaboration skills, (6) independence, (7) physical and mental well-being, and (8) communication skills. These dimensions reflect the comprehensive competencies that students are expected to acquire upon completing the educational process (Kemendikdasmen, 2025). The following section presents the framework of deep learning.

Figure 2. *Deep learning framework* (kemendikdasmen, 2025)



Based on the deep learning framework, there are four main elements: (1) graduate profile dimensions, (2) learning principles, (3) learning experiences, and (4) learning structures (Kemendikdasmen, 2025). The first element, Graduate Profile Dimensions, in Deep Learning in Indonesia produces eight dimensions of student graduate profiles, which are as follows:

- Faith and Devotion to God Almighty: Students demonstrate strong spiritual beliefs through virtuous, loving, and responsible behavior, reflecting a harmonious relationship with God, others, and the environment.
- Citizenship: Students love their country, adhere to rules, care for society and the environment, and actively contribute to solving social problems while upholding the values of Pancasila and the spirit of unity in diversity.
- Critical Thinking: Students are able to think logically, analytically, and reflectively to understand and solve problems systematically, considering various perspectives and making evidence-based decisions.
- Creativity: Students think innovatively and originally in producing meaningful solutions or works that have a positive impact, with the ability to view problems from various perspectives.

- Collaboration: Students are able to work effectively with others, respect differences, share roles and responsibilities, and create a harmonious working environment for the common goal.
- Independence: Students take responsibility for their own learning process, show initiative, perseverance, and the ability to manage resources, while continuously learning and adapting independently in response to changes.
- Health: Students maintain physical fitness and mental balance through a healthy lifestyle, supporting both personal and social well-being and productivity.
- h. Communication: Students are able to clearly convey ideas and information, listen actively, respect differing opinions, and build positive relationships in various social and professional situations.

Secondly, the principles of learning serve as an essential foundation to ensure that the learning process is effective. The three main principles that form the basis of effective learning in the Merdeka Education are mindful, meaningful, and joyful. These principles complement each other to create a profound and holistic learning experience for students.

- Mindful: Students become aware of their active role in learning, understand the learning objectives, and are able to regulate their strategies and internal motivations to continuously develop. This supports the development of lifelong learners.
- Meaningful: Learning becomes meaningful when the knowledge acquired can be applied in real-world contexts, whether personal, local, national, or global. Involving the surrounding environment, including parents and the community, makes the learning process more relevant and fosters social responsibility.
- Joyful: Joyful learning creates a positive atmosphere and motivation. The enjoyment students experience helps them better understand the material, feel emotionally connected, and have their needs met, motivating them to continue learning enthusiastically.

The three principles of learning are implemented through four main aspects: intellectual development, emotional development, aesthetic development, and physical development. According to Ki Hajar Dewantara, these four aspects integrate into the educational process to shape a well-rounded individual. First, Intellectual Development (Cognitive): This process focuses on developing critical and analytical thinking skills to solve problems and understand various fields of knowledge. It forms intellectual intelligence and reasoning abilities. Second, Emotional Development (Ethics): This aspect focuses on character formation, emotional sensitivity, and moral-spiritual values. Students are encouraged to understand goodness, take responsibility, and respect and care for others. Third, Aesthetic Development (Aesthetics): This aspect sharpens sensitivity to beauty and social empathy through art, culture, and nature. Its goal is to refine the soul and create harmonious relationships among people. Fourth, Physical Development (Kinesthetic): This emphasizes the importance of physical health and strength, while also fostering discipline, resilience, and teamwork. The balance of body and soul becomes an integral part of holistic education (Gunawan, 2022).

Third, learning experience refers to the process individuals undergo to acquire knowledge, skills, attitudes, or values through interactions in various environments such as school, home, workplace, and daily life. In deep learning, these experiences are designed by educators and are aligned with the SOLO taxonomy and Bloom's taxonomy to encourage progressively deeper understanding. The SOLO taxonomy categorizes learning outcomes into five hierarchical levels, ranging from basic to more complex levels of understanding: (1) Pre-structural: Learners have not yet grasped the material. (2) Uni-structural: Learners understand one part of the material. (3) Multi-structural: Learners

understand several parts, but they are not yet interconnected. (4) Relational: Learners can integrate various parts in a cohesive manner. (5) Extended Abstract: Learners can apply their understanding in new situations or contexts. This SOLO taxonomy, along with Bloom's taxonomy (Anderson et al., 2001; Biggs & Collis, 2014), become an important reference in in-depth learning, as shown in the following table.

Table 2. *Learning taxonomy in deep learning*

Bloom's Taxonomy	SOLO Taxonomy Learning Levels	Taxonomy	Learning Experience	Description
Creating	Excellence	Abstract	Reflecting	Expanding and applying ideas
Evaluating	Secure	Thinking	Applying	Connecting ideas
Analyzing		Rational		
Applying	Developing	Thinking	Remembering	Having multiple ideas
Understanding		Multistructural		
Remembering	Foundation	Unistructural	-	Recalling ideas
-	Incompetence	Prestructural		Not yet comprehending

The learning experience in Deep Learning is a gradual process that begins with understanding, applying, and reflecting on knowledge and skills. In the understanding phase, learners recall prior knowledge and start building comprehension through an active approach, utilizing various sources and contexts. This phase aligns with the unistructural and multistructural levels in SOLO taxonomy, as well as remembering and understanding in Bloom's taxonomy. The applying phase occurs when learners apply knowledge in real-life situations, both individually and collaboratively. They learn to solve contextual problems through a multidisciplinary approach, build creative solutions, and develop life skills. This phase aligns with the relational and extended abstract levels in SOLO, as well as analyzing, applying, evaluating, and creating in Bloom's taxonomy. The reflecting phase enables learners to assess their learning process and outcomes independently, evaluate strengths and challenges, and formulate steps for improvement. This reflection also strengthens self-regulation and the social role of learners, making the learning process more meaningful and sustainable (Kemendikdasmen, 2025).

Fourth, there is the Deep Learning framework, which serves as a structured guide in building an educational ecosystem that supports meaningful, reflective, and contextual learning processes. This framework not only focuses on the cognitive aspect but also encompasses four main interconnected components (Kemendikdasmen, 2025), namely:

- **Pedagogical Practices:** The teaching strategies employed by educators aim to promote authentic and applicable learning experiences. The approaches implemented emphasize higher-order thinking, collaboration, and problem-solving, such as inquiry-based learning, project-based learning, problem-based learning, collaborative learning, design thinking, STEAM, and SETS.
- **Learning Environment:** Both physical and digital learning spaces are designed to be flexible in order to encourage exploration, reflection, and collaboration. Additionally, this environment fosters a learning culture rooted in spiritual values, citizenship, independence,

and physical and mental well-being, supporting the holistic development of students' character.

- Utilization of Digital Technology: Technology serves as an interactive tool that supports the creation of knowledge, collaboration, and innovation. The use of technology in Deep Learning goes beyond simply being a medium for delivering content; it serves as a means for students to explore and critically evaluate information.
- Learning Partnerships: Collaboration between teachers, students, parents, communities, and professional partners creates a more participatory and contextual learning process. Students are engaged as active participants in designing their learning, with support from their surroundings and subject matter experts.

The design of a deep learning-based civic education teaching strategy as an effort to promote deep learning

21st-century education demands more than just the delivery of knowledge. It requires a learning approach that fosters deep understanding, critical thinking skills, creativity, and collaborative abilities among students. In this context, the Design Thinking approach, coupled with the Double Diamond model, serves as a relevant and effective strategy to promote Deep Learning in pedagogical practices. This relevance is further strengthened by the integration of Design Thinking into the Deep Learning framework, particularly within the core elements of learning in the pedagogical practices component. Referring to the Academic Manuscript on Deep Learning (Kemendikdasmen, 2025), pedagogical practices refer to the teaching strategies employed by educators to achieve learning objectives and shape the graduate profile dimensions. To implement deep learning, educators need to focus their teaching practices on providing students with authentic learning experiences, oriented toward real-world applications, while encouraging higher-order thinking skills and collaboration. Various strategies can be utilized, such as Inquiry-Based Learning, Project-Based Learning, Problem-Based Learning, Collaborative Learning, Design Thinking-Based Learning, STEAM (Science, Technology, Engineering, Arts, and Mathematics), and SETS (Science, Environment, Technology, and Society).

Design Thinking is a solution-oriented approach that emphasizes empathy, real-world problem exploration, and innovation development. The Double Diamond model, consisting of four key stages, Discover, Define, Develop, and Deliver, offers a systematic structure of both divergent and convergent thinking. The Discover and Define stages stimulate students to understand the context and critically formulate problems, while the Develop and Deliver stages encourage them to generate and implement solutions creatively (Binus, 2021). Meanwhile, Deep Learning in education aims to shape students who can grasp concepts comprehensively, relate learning to real-life situations, and possess intrinsic motivation to learn. The characteristics of Deep Learning include Mindful Learning, Meaningful Learning, and Joyful Learning, all of which require a challenging, collaborative, and reflective learning environment (Kemendikdasmen, 2025; Putri et al., 2024).

The use of the Design Thinking approach directly fosters the creation of Deep Learning. In practice, the Design Thinking process activates authentic, problem-based learning experiences, which are integral components of deep learning. For instance, in the Discover phase, students are encouraged to engage in an in-depth exploration of social, cultural, or scientific phenomena. This aligns with the principle of Meaningful Learning, where learning is linked to real-life contexts. In the Define phase, students practice developing critical and reflective thinking skills, which are central to Mindful

Learning. Then, in the Develop and Deliver phases, students are encouraged to create solutions, build prototypes, and test their ideas in real-world situations, all of which strengthen active engagement and foster Joyful Learning. The table below can be used to understand the connection between the Design Thinking approach and Deep Learning.

Table 3. *The connection between design thinking and deep learning*

Design Thinking Stage	Description	Connection to Deep Learning	Deep Learning Elements
Discover	Exploring problems through observation and empathy	Encouraging contextual understanding and emotional engagement	Meaningful Learning, Mindful Learning
Define	Formulating the core problem critically and focused	Training critical and reflective thinking	Mindful Learning
Develop	Generating various creative solutions (ideation)	Stimulating creativity and collaboration	Joyful Learning, Meaningful Learning
Deliver	Testing and applying solutions in real-world contexts	Increasing active engagement and experiential learning	Joyful Learning, Experiential Learning

To effectively integrate the Design Thinking approach into Civic Education learning, careful and structured planning is required. This planning serves as the foundation to guide the learning process, ensuring that the focus is not solely on the cognitive aspect, but also on deeply engaging students' emotional and social involvement. In this context, PKN learning planning based on Design Thinking is designed as an effort to achieve Deep Learning, learning that is meaningful, reflective, and student-centered. The planning framework for Civic Education (PKN) based on Design Thinking, aimed at promoting Deep Learning, refers to the primary source of research by Sinaga et al. (2023). The following steps can be utilized to design an effective learning process.

Discover, in this phase, after the group has selected a topic or problem (grand topic), they are asked to identify various aspects that pose challenges or barriers to the chosen topic. The Discover phase is a process of collecting in-depth information about the topic, where students are tasked with uncovering as many causal factors as possible that lead to the emergence of the problem. This phase forms the first part of the Double Diamond model, in which students are encouraged to broaden their understanding (diverge) of the existing problem, not just from a personal or academic perspective but also by considering a broader viewpoint.

In the discover phase, students are expected to explore the various factors that contribute to the emergence of the problem, while also identifying opportunities, needs, trends, and insights that can guide them toward more relevant and targeted solutions. This is a critical stage, as it aims to

provide a deep learning experience for students to understand real-world issues, not simply from a product-based approach but more focused on user-based needs.

The discover phase demands that students have empathy for the issue at hand, and in this process, they must understand the problem from various perspectives, not just from their academic viewpoint as students. Therefore, students are asked to conduct comprehensive research, such as surveys, empirical studies, literature reviews, journal critiques, and analysis of previous research. To implement the discover phase in a design Thinking-based project learning, the following steps can be taken:

- The teacher explains the stages of the Design Thinking project learning using the Double Diamond model to the students.
- The teacher provides an explanation of the Discover concept and the importance of gaining a deeper understanding of the issue being addressed.
- The teacher educates students about empathy in the Discover phase, ensuring that the project focuses on user needs rather than just products.
- Students conduct research to gather the necessary data to identify the various issues present in the sub-topic selected by their group.
- After sufficient information is gathered, students hold group discussions to plan the next steps in their research process.

The **Define** phase aims to analyze and synthesize the results of the problem identification conducted in the Discover phase, in order to formulate the central question of the Design Thinking-based project. In this phase, students, working in groups, determine, clarify, and define the core issue in the form of an essential question that will guide the development of solutions and project ideas.

The identified problem is then transformed into a fundamental question (essential question) that will direct the search for solutions and interventions. The Define phase forms part of the first diamond and encourages a converging thinking process to filter and narrow down ideas into the main problem focus. Students are expected to select, prioritize, and formulate a single core problem from various issues and ideas that arise, which will serve as the foundation for the project to be developed. To implement the Define phase in Design Thinking-based project learning, the following steps can be undertaken:

- The teacher explains the Define phase in the Design Thinking-based learning process.
- The teacher introduces various techniques for determining the main issue that will be the focus of the project.
- The teacher provides space for students in groups to ask questions regarding the Define phase and the techniques used to determine the core problem.
- Students conduct independent group discussions to define the core problem that will serve as the foundation for the project and the solution to be designed.

The Develop phase aims to enable students to generate solutions (ideation) to the core problem defined in the previous Define phase. In addition, this phase involves designing relevant and applicable intervention project prototypes to address the identified problem. During this phase, designers and innovators begin the solution construction process through two main stages: the ideate phase and the prototype phase. The Develop phase falls under divergent thinking, where broad perspectives, cross-disciplinary collaboration, and a multidimensional approach are required to ensure that the ideas generated are truly innovative and meet the needs of users (user-based). For this reason, students also

need to conduct research, both empirically and through literature reviews, such as scientific journals and previous research findings.

In the Ideate phase, students are asked to design solutions based on the essential question formulated in the Define phase. The solutions generated are not limited to products alone but are focused more on user-based approaches. To support this divergent thinking process, students are encouraged to broaden their perspectives through cross-disciplinary research, both empirical studies and literature reviews, to gain a more holistic view of the solution to be offered. The following are the steps for implementing the Ideate phase:

- The teacher explains the concept and stages of the Ideate phase in the Design Thinking-based project learning process.
- Students, in groups, are guided to conduct research and multidisciplinary exploration to develop innovative and relevant solutions.
- The teacher provides an opportunity for each group to ask questions or discuss the Ideate phase.
- Students carry out independent group discussions to formulate solution ideas based on their exploration results.

In the Prototype phase, the solutions developed are translated into project plans or intervention prototypes. In this phase, students are expected to design the details of project implementation, develop schedules, create execution control sheets, and establish a project monitoring system with a user-centered approach. The following are the steps for implementing the Prototype phase:

- The teacher explains the Prototype phase in the Design Thinking-based project learning process.
- Students, working in groups, continue their research and cross-disciplinary study to design appropriate and contextually relevant intervention prototypes.
- The teacher facilitates a Q&A session for any group that wants to deepen their understanding of the Prototype phase.
- Students discuss and collaborate within their groups to design the project prototype.
- The teacher monitors, facilitates, guides, and provides feedback on project planning (design a plan), scheduling (create a schedule), and implementation monitoring (monitor progress).
- Students are asked to compile a report summarizing activities from the Discover, Define, and Develop phases.
- Each group presents their project progress up to the Prototype stage in front of the class.
- Other groups provide constructive feedback, suggestions, or input to enrich the presented prototype design.
- After the presentation, each group holds a discussion to refine their project prototype design before field implementation.

The Deliver phase is the implementation stage of the project design developed previously in the Develop phase. This stage represents the second part of the Double Diamond model of Design Thinking and falls under convergent thinking. In other words, students begin to narrow their thinking towards actual execution, with a focus on the concrete implementation of the ideas and prototypes they have designed.

During this phase, students are required to execute, test, produce, and launch the project based on the plan that has been formulated. The implementation occurs outside the classroom, but under

the guidance and supervision of the teacher. This stage also embodies the practical aspect of Project-Based Learning (PjBL), which emphasizes action and real results from the learning process.

Project-Based Learning (PjBL) is a method that focuses on project development, where students have the opportunity to design, implement, and evaluate projects that can be applied to real-life situations outside the classroom (Dahri, 2022). Additionally, project-based learning is a method that enables students to create works both individually and in groups. In the process standards, this approach is recommended to encourage students' abilities to produce contextual works. Through project-based learning, students actively generate works relevant to the real-world problems around them in their daily lives. This method offers hands-on experience and demands a learning process that goes beyond merely acquiring knowledge (Lestari & Yuwono, 2022).

Project-Based Learning (PjBL) is a teaching method that centers on projects or activities as a means to achieve competencies in attitudes, knowledge, and skills. This approach emphasizes active student involvement in producing a product by applying research, analysis, creativity, and presentation skills based on real-life experiences. The product created can be a design, scheme, written work, art, technology, or craft. This learning approach also gives students the freedom to work both independently and in groups to create tangible and meaningful products (Banawi, 2019). The steps for implementing the Deliver phase (implementation) can be outlined as follows:

- The teacher explains the Deliver phase in Design Thinking-based project learning, highlighting the importance of this step as a concrete solution to the problem.
- Students, in groups, are given the freedom to start implementing the project they have designed.
- Students carry out the project directly in a relevant environment, in line with the intervention objectives that have been set.
- The teacher regularly monitors and provides guidance on the implementation and progress of the project through weekly reports from each group. This monitoring occurs during each meeting.
- After the project is completed and implemented, students are required to compile a final project report that includes the process, results, challenges, and lessons learned.

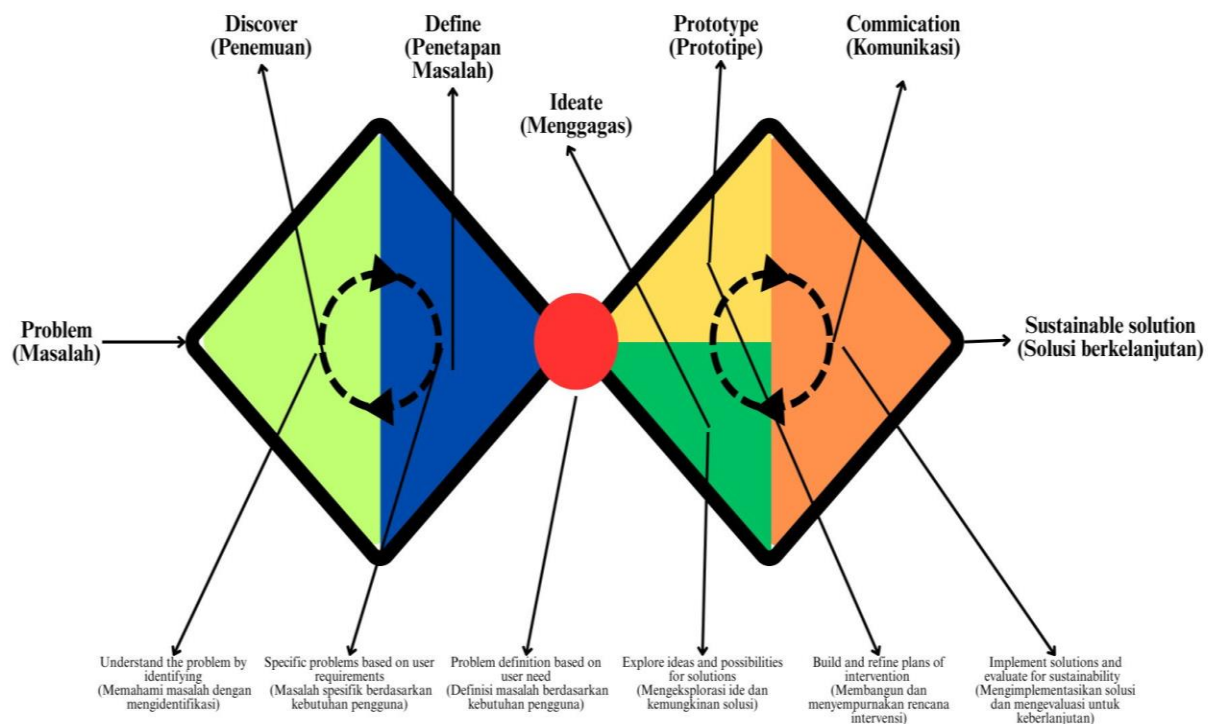
Communication, after completing all the stages in the Double Diamond Design Thinking model and successfully finishing the project, students are guided to enter the Communication phase. This phase serves as a means to convey the achievements and learning experiences gained during the project execution. Communication activities can take various forms, such as: in-class presentations, project showcases, posters or visual exhibitions, digital publications in the form of activity videos, academic articles written for service journals, or other forms of communication relevant to the project's content and outcomes.

The primary objective of the communication phase is to disseminate the results and positive impacts of the project conducted by students, not only within the classroom but also across the campus and the broader community. In doing so, the values of collaboration in addressing citizenship, social, and national issues can be reinforced through students' concrete experiences. Furthermore, students are also expected to reflect on the learning they have gained throughout the project execution process and understand how that experience contributes to the achievement of the learning objectives in the course they have undertaken. The steps for implementing the communication phase can be outlined as follows:

- The teacher provides an opportunity for each group to present the results of their implemented project.
- Students present their projects in the form of direct presentations, showcases, or visual posters in front of the class, explaining the project stages and the impact generated by the project.
- Students may show a video documentation of the project activities that illustrates the execution process and problem-solving steps taken.
- The teacher facilitates a Q&A session, allowing students from other groups to ask questions to the presenting group, and the presenting group provides explanations or responses.
- The teacher asks each group to reflect on their learning experiences during the project execution, as well as the impact of the solutions or interventions they applied to the issues addressed.

As a breakdown of the previously described stages, the Design Thinking Project-Based Learning process with the Double Diamond approach has a systematic sequence or steps that can serve as a guideline for implementation. This sequence reflects the students' creative and critical thinking process, from problem exploration to solution delivery and learning reflection. Based on the above explanation, the syntax of the Double Diamond Design Thinking-based project model can be illustrated in the following diagram.

Figure 3. *Syntax design thinking* (Sinaga et al.,2023)



Source: Sinaga et al., (2023)

Discussion

In this study, the implementation of Citizenship Education learning strategies based on Design Thinking, especially through the Double Diamond Process Model, shows a strategic and innovative approach in facilitating deep learning. This model is designed to invite students to play an active role in critical and creative thinking, which is essential to facing the challenges of 21st century education. Through four main stages: Discover, Define, Develop, and Deliver this strategy creates space for students to not only master the concept of citizenship, but also apply it in a relevant social context.

In the Discover and Define stages, students are encouraged to develop empathy for the social issues around them. This approach is very important in the context of Civic Education because empathy fosters a deeper understanding of the problems faced by society, both locally and globally. In these two stages, students learn to see problems from a broader perspective, explore the roots of the problem comprehensively, and develop an in-depth understanding of civic issues. This is in line with research conducted by Hylton (2018), which shows that developing empathy in education can improve understanding of social problems and increase active engagement in civic learning.

Next, in the Develop and Deliver stage, students are invited to innovate by designing solution ideas that are solution-oriented, while implementing them in real contexts based on community needs. This solution-based learning not only makes students more creative, but also improves their ability to think analytically and apply knowledge to solve problems faced by the community. Zakaria et al (2019) also noted that project-based learning that involves solutions to real problems in the community can improve problem-solving skills and encourage the application of knowledge more relevantly.

This approach is very much in line with the main principles of Deep Learning, which emphasize the importance of meaningful, conscious, and enjoyable learning experiences. Learning is not only focused on mastering theoretical material, but also on the formation of skills and attitudes that are relevant to real life. In it, students not only learn to remember or understand content, but also apply that knowledge in a contextual and adaptive way to social change. Baden & Major (2004) in their study also stated that deep learning emphasizes the application of knowledge in real-world contexts, which creates a deeper and more relevant learning experience for students.

The learning environment created by this approach becomes more collaborative and reflective. Students work in groups, discussing and collaborating with each other, which allows them to see and understand different perspectives in solving social problems. This process also encourages students to think critically about the concept of citizenship, as well as to be reflective about their role in society. Vygotsky (1978) emphasized the importance of social interaction in learning, which supports the idea that collaborative learning can enrich students' understanding and help them construct knowledge more effectively.

In addition, this approach introduces a context that is very relevant to the dynamics of today's global society. In an increasingly connected world, the social challenges faced are no longer limited to the boundaries of a particular country or culture. Thus, the application of Design Thinking in Citizenship Education not only prepares students to become good citizens at the national level, but also at the global level. This approach provides them with the tools to face global challenges that require critical thinking, innovation, and social responsibility. Giddens & Sutton (2021) in his theory of globalization also states that education in the global era must prepare students to think globally and act locally, which is in line with the concept of solution-based learning in Design Thinking.

In line with that, the results achieved in the application of this model increase students' intrinsic motivation in the learning process. When they feel involved in projects that are relevant to social needs and are able to produce solutions that have a real impact, they become more motivated to continue the learning process. Deci & Ryan (2008) in their motivation theory state that intrinsic motivation is created when individuals feel that the activities they do have meaning and purpose that are in accordance with their personal values, which are reflected in the learning experience provided by this approach.

This success is not only seen from academic achievement, but also in the formation of students' characters as responsible individuals who are ready to face future challenges. By implementing Design Thinking, students not only learn to understand the concept of citizenship, but also become active citizens and can make positive contributions to society. Jonassen (2000) also emphasized that learning based on solving real-world problems can improve students' critical thinking skills and equip them with the skills needed to participate effectively in society.

Thus, this study confirms that Design Thinking, especially through the Double Diamond Process Model, offers a very effective approach in building deep and relevant learning in Citizenship Education. This approach not only develops students' academic skills but also social and citizenship skills that are very important in an ever-evolving world. The application of this model can make a significant contribution in forming citizens who not only understand their rights and obligations, but also actively contribute to building a better society, especially in this increasingly complex era of globalization.

The implications of this research are significant for various stakeholders. For future investigators, this study opens opportunities to further examine the long-term effects of integrating the Design Thinking-based learning strategy in Civic Education across different educational levels and cultural settings. For practitioners, the findings suggest the importance of adopting and adapting the Double Diamond Process Model to foster deeper student engagement and critical thinking skills. Administrators and policymakers are encouraged to consider supporting professional development programs that equip educators with the necessary skills to implement Design Thinking approaches effectively in the classroom.

However, this study also has certain limitations. Since the research was conducted through a qualitative literature review, the findings are theoretical in nature and have not yet been tested empirically in classroom settings. Methodological constraints include reliance on secondary data, which may limit the generalizability of the results. Future research involving empirical testing, such as experimental or action research methods, is needed to validate and strengthen the application of Design Thinking in Civic Education.

Conclusion and Implications

This study aimed to design a Civic Education learning strategy that integrates the concept of Design Thinking, particularly using the Double Diamond Process Model, with the principles of Deep Learning to address the evolving demands of 21st-century education. The integration of these two concepts was deliberately structured to enhance students' critical, creative, and reflective engagement with civic issues. Design Thinking, implemented through the four stages of Discover, Define, Develop, and Deliver, provides a systematic and human-centered framework that guides learners from the identification of problems to the implementation of relevant solutions. In the Discover and Define stages, learners develop empathy, analyze social contexts, and articulate citizenship problems. In the

Develop and Deliver stages, they generate ideas and apply those solutions based on real community needs. The use of Deep Learning emphasizes a learning process that is mindful, meaningful, and joyful. It ensures that students engage beyond rote memorization and instead participate in sustained, reflective, and collaborative learning. This approach not only deepens their understanding of citizenship concepts but also strengthens their motivation and sense of responsibility in civic life.

Therefore, this study concludes that the integration of Design Thinking and Deep Learning in Civic Education is effective in fostering students' critical thinking, creativity, and civic responsibility. The structured use of both frameworks supports transformative learning that prepares students to become active and responsible citizens in a global context. It is recommended that educators in Civic Education apply the Double Diamond model of Design Thinking in their instructional strategies. Institutions should also facilitate continuous professional development to support this pedagogical shift. Further studies may explore the long-term impacts of this integrated model and its adaptability across different educational and cultural settings.

Disclosure statement

This research was carried out independently, with no conflict of interest involved.

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