The Role of Metacognition in Character Education: A Case Study on Students' Moral and Ethical Formation Strategies
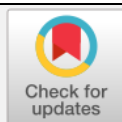
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ABSTRACT

Character education is essential in shaping students' morals and ethics. This study aims to examine the role of metacognition in character education through a comprehensive literature review. Metacognition, encompassing metacognitive knowledge and skills, enhances the effectiveness of character education by providing strategies such as self-reflection, goal setting, self-monitoring, and self-assessment. The research employs a literature review approach, selecting articles and studies from credible and relevant sources. Data analysis addresses the main question of how metacognitive strategies can be applied to shape students' morals and ethics. Key findings indicate that metacognition significantly contributes to character education, although challenges such as limited teacher understanding and resource constraints persist. Identified opportunities include developing teacher training programs focused on metacognition and character education and the potential for improved student learning outcomes. This study concludes that integrating metacognition into character education not only enhances the formation of students' morals and ethics but also offers practical strategies for implementation in schools. Practical recommendations and areas for further research are presented for ongoing development in this field.

1. Introduction

Character education plays a pivotal role in shaping the moral and ethical values of students. It involves cultivating virtues such as respect, responsibility, honesty, and empathy, which are essential for developing well-rounded individuals and responsible citizens. Effective character education fosters a positive school climate and enhances students' social and emotional skills, which are crucial for their overall development and success in life (Jubilee Centre for Character and Virtues, 2022; Lickona, 1991).

Studies show that schools with robust character education programs experience fewer behavioral problems, higher student engagement, and improved relationships among students (Berkowitz & Bier, 2005). By instilling core values and promoting ethical behavior, character education equips students to navigate social challenges and fosters a sense of community and belonging. Additionally, integrating character education into the curriculum has been linked to improved academic performance. Students who display traits like perseverance, responsibility, and empathy tend to excel academically and are more likely to achieve long-term success (Noddings, 2007).

Metacognition, defined as the awareness and regulation of one's cognitive processes, significantly enhances the effectiveness of character education. Metacognitive strategies, such as self-reflection, enable students to become more aware of their thoughts and behaviors, fostering deeper internalization of moral and ethical principles (Hacker et al., 2009; Padmanabha, 2020). These skills also facilitate self-regulation, a critical aspect of moral development. Through goal setting and self-monitoring, students learn to establish personal standards for ethical behavior and evaluate their progress, aligning their actions with their moral values (Bajovic & Rizzo, 2021; Negi et al., 2022).

Reflective thinking, a key component of metacognition, is vital for character education. It allows students to critically analyze their beliefs and attitudes, leading to greater empathy and understanding of others. This reflective approach not only enhances moral reasoning but also promotes a more inclusive and respectful school environment (Jerome & Kisby, 2019).

In Indonesia, character education is integral to national educational goals as outlined in the curriculum. The country places a strong emphasis on developing students' character in line with Pancasila, the foundational philosophical theory. The government has implemented various programs and policies to integrate character education into the school system, recognizing its importance in fostering national unity and social harmony.

Metacognition plays a crucial role in enhancing the effectiveness of these programs. Indonesian educators increasingly incorporate metacognitive strategies to help students internalize the values taught in character education. Strategies such as reflective practices, self-assessment, and goal-setting align with the country's cultural and educational objectives. By promoting metacognitive awareness, Indonesian students can develop a deeper understanding of their moral and ethical responsibilities, leading to more consistent and principled behavior (Retnawati et al., 2018; Susilo et al., 2022).

Moreover, integrating metacognitive strategies can address challenges such as diverse cultural backgrounds and varying levels of teacher preparedness. Providing professional development opportunities focused on metacognitive and character education can better equip educators to foster students' moral development. This approach supports the holistic growth of students and aligns with Indonesia's broader educational and societal goals (Suminto & Mbato, 2020; Werdiningsih et al., 2022).

This research aims to explore the role of metacognition in character education through a comprehensive literature review. It seeks to answer key questions: What is the role of

metacognition in character education? How can metacognitive strategies be applied to shape the moral and ethical values of students?

2. Literature Review
2.1. The Concept of Metacognition

Metacognition refers to the awareness and regulation of one's cognitive processes. It encompasses two main components: metacognitive knowledge and metacognitive skills. Metacognitive knowledge involves understanding one's learning processes, strategies, and capabilities, as well as the nature of tasks and the effectiveness of various approaches to learning (Flavell, 1979). This includes declarative knowledge (knowing about things), procedural knowledge (knowing how to do things), and conditional knowledge (knowing when and why to use various strategies) (Schraw & Dennison, 1994).

Metacognitive skills, on the other hand, involve the regulation of cognitive activities through planning, monitoring, and evaluating. Planning includes selecting appropriate strategies and allocating resources before engaging in a learning task. Monitoring refers to the awareness of comprehension and task performance during the learning process. Evaluating involves assessing the outcomes and processes of one's learning after the task is completed (Brown, 1987). Recent studies highlight the importance of metacognitive skills in enhancing academic performance and promoting lifelong learning (Dignath & Büttner, 2018; Zohar & Barzilai, 2013).

2.2. The Concept of Character Education

Character education is the deliberate effort to develop virtues that are good for the individual and society, such as respect, responsibility, honesty, and empathy. Its goal is to foster moral and ethical development, helping students to become well-rounded individuals and responsible citizens (Lickona, 1991). Character education involves both explicit and implicit teaching methods, whereas explicit methods include direct instruction on virtues and ethical behavior. In contrast, implicit methods involve creating a school culture that promotes these values through role modeling and social interactions (Nucci & Narvaez, 2008).

Character education is important because of its ability to improve social and emotional skills, reduce behavioral problems, and enhance academic performance. A positive school climate, fostered by effective character education, contributes to better student engagement and stronger relationships among students (Berkowitz & Bier, 2005). Recent research continues to support these findings, emphasizing the holistic benefits of character education in various educational contexts (Althof & Berkowitz*, 2006; Jubilee Centre for Character and Virtues, 2022).

2.3. The Contribution of Metacognition to Character Education

Metacognition can significantly enhance character education by fostering self-awareness and self-regulation. Metacognitive strategies, such as self-reflection, enable students to become more conscious of their thoughts, behaviors, and their alignment with moral and ethical principles. By engaging in regular self-reflection, students can internalize values more deeply and develop a stronger understanding of ethical conduct (Hacker et al., 2009; Padmanabha, 2020).

The role of metacognitive skills in self-regulation is particularly crucial for moral development. Through processes like goal setting and self-monitoring, students learn to establish personal standards for ethical behavior and track their progress toward these goals.

This continuous self-assessment helps students align their actions with their moral values, promoting principled decision-making and ethical behavior (Bajovic & Rizzo, 2021; Negi et al., 2022). Recent studies suggest that students who effectively use metacognitive strategies are better equipped to handle ethical dilemmas and demonstrate consistent moral behavior (Tangney et al., 2018).

Reflective thinking, a core aspect of metacognition, is essential in character education. It encourages students to critically examine their beliefs and attitudes, leading to greater empathy and understanding of others. This reflective practice not only enhances moral reasoning but also fosters a more inclusive and respectful school environment (Jerome & Kisby, 2019). Contemporary research continues to explore the integration of metacognitive strategies in character education, demonstrating their effectiveness in diverse educational settings (Avargil et al., 2018; Hart, 2022; Rivas et al., 2022).

In Indonesia, character education is a critical component of the national curriculum, aligned with the philosophical foundations of Pancasila. The integration of metacognitive strategies in character education programs helps students internalize these values more effectively. Strategies such as reflective practices, self-assessment, and goal-setting are increasingly being used to enhance students' understanding of their moral and ethical responsibilities (Retnawati et al., 2018; Susilo et al., 2022). Recent research highlights the positive impact of these approaches on student behavior and academic performance, reinforcing the importance of metacognition in character education (Suminto & Mbato, 2020; Werdiningsih et al., 2022).

3. Research Methodology
3.1. Research Design

This study employs a literature review approach to explore the role of metacognition in character education. A literature review synthesizes existing research on a topic to provide a comprehensive understanding of the subject, identify gaps in the current knowledge, and offer insights for future research (Snyder, 2019). This method is particularly suitable for examining the theoretical underpinnings and empirical evidence related to the integration of metacognition in character education.

3.2. Criteria for Selecting Articles and Studies

Several criteria guided the selection of articles and studies for this literature review to ensure credibility and relevance:

1) Credibility of Sources
   Only peer-reviewed journal articles, books, and official reports were included to ensure the reliability of the information (Booth et al., 2021).
2) Relevance to Research Questions
   Articles and studies were selected based on their relevance to the key research questions: the role of metacognition in character education and the application of metacognitive strategies in shaping students' moral and ethical values.
3) Publication Date
   Preference was given to recent publications (within the last 10 years) to capture the latest developments and contemporary perspectives in the field (Xiao & Watson, 2019).
4) Geographical Context
   While the primary focus is on research applicable to Indonesia, studies from other contexts were also considered if they provided valuable insights or comparative perspectives (Tranfield et al., 2003).

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3.3. Steps in Collecting Relevant Literature

The following steps were undertaken to collect relevant literature:

1) Database Search

   Comprehensive searches were conducted in academic databases such as Google Scholar, JSTOR, PubMed, and ERIC using keywords such as "metacognition," "character education," "moral development," and "ethical behavior" (Graham, 2011).

2) Screening and Selection

   Titles and abstracts of the retrieved articles were screened to assess their relevance. Full texts of potentially relevant articles were then reviewed to ensure they met the inclusion criteria (Cooper, 2017).

3) Manual Search

   References of the selected articles were manually searched to identify additional relevant studies that might have been missed during the database search (Webster & Watson, 2002).

3.4. Data Analysis

The data from the selected literature will be analyzed using thematic analysis to identify patterns and themes related to the research questions (Braun & Clarke, 2006). The following steps will be followed:

1) Familiarization

   Reading and re-reading the selected literature to become familiar with the content and key findings.

2) Coding

   Systematically coding the data to identify significant concepts and patterns related to metacognition and character education.

3) Theme Development

   Grouping the codes into broader themes that capture the relationship between metacognitive strategies and character education outcomes.

4) Synthesis

   Synthesizing the themes to provide a comprehensive overview of how metacognition contributes to character education and to answer the research questions (Thomas & Harden, 2008).

4. Results

4.1. Integration of Metacognition in Character Education

4.1.1. Metacognitive Strategies in Character Education

Various metacognitive strategies can be effectively applied in character education to foster students' moral and ethical development. These strategies include:

1) Self-Reflection

   Encouraging students to reflect on their thoughts, actions, and their alignment with moral and ethical values. Self-reflection helps students to internalize virtues and understand the consequences of their behavior (Hacker et al., 2009; Padmanabha, 2020).

2) Goal Setting

   Teaching students to set personal goals related to ethical behavior and moral development. Goal setting provides a clear direction for students and helps them focus on specific virtues and ethical standards they aim to achieve (Bajovic & Rizzo, 2021; Negi et al., 2022).

3) Self-Monitoring

Enabling students to monitor their progress towards their moral and ethical goals. Self-monitoring involves regularly assessing one's behavior and making necessary adjustments to stay aligned with set standards (Brown, 1987).

4) Self-Assessment

Encouraging students to evaluate their behavior and the outcomes of their actions. Self-assessment promotes accountability and helps students understand the impact of their actions on themselves and others (Schraw & Dennison, 1994).

4.1.2. Case Studies and Concrete Examples

1) Case Study 1: Integrating Metacognitive Strategies in an American High School

In an American high school, teachers implemented a character education program that incorporated metacognitive strategies. Students engaged in weekly self-reflection sessions where they wrote journals about their daily experiences and the ethical dilemmas they faced. Teachers guided students in setting personal goals related to virtues like honesty and respect. Additionally, students participated in peer monitoring groups where they provided feedback on each other's progress toward their goals. This program resulted in improved student behavior, higher levels of empathy, and a more positive school climate (Avargil et al., 2018).

2) Case Study 2: Metacognition in Character Education in Indonesian Schools

In Indonesia, a character education initiative integrated metacognitive strategies into the national curriculum. Students were encouraged to engage in self-assessment activities, such as rating their adherence to ethical values on a weekly basis. Teachers facilitated discussions on moral dilemmas and guided students in setting and monitoring their ethical goals. This approach helped students internalize the values outlined in Pancasila, leading to a noticeable decrease in behavioral problems and increased student engagement (Retnawati et al., 2018; Susilo et al., 2022).

3) Case Study 3: Reflective Practices in a UK Primary School

In a primary school in the UK, reflective practices were used as a core component of character education. Students participated in daily reflection circles where they discussed their actions and their impact on others. Teachers provided scaffolding to help students develop metacognitive skills such as planning and self-monitoring. The program emphasized empathy, responsibility, and respect, leading to enhanced moral reasoning and stronger interpersonal relationships among students (Jerome & Kisby, 2019).

4) Case Study 4: Goal Setting and Self-Monitoring in a Canadian Middle School

A Canadian middle school implemented a character education program that focused on goal setting and self-monitoring. Students set specific, measurable goals related to ethical behavior at the beginning of each term. Teachers provided regular feedback and facilitated self-monitoring activities where students tracked their progress and reflected on their successes and areas for improvement. This program resulted in higher academic performance and better student-teacher relationships, as students felt more accountable for their actions (Tangney et al., 2018).

The integration of metacognitive strategies in character education has shown positive results across various educational contexts. Strategies such as self-reflection, goal setting, self-monitoring, and self-assessment not only enhance students' moral and ethical development but also contribute to a more positive school environment. These case studies demonstrate that metacognition can be a powerful tool in fostering character education, leading to well-rounded individuals who are capable of making principled decisions and contributing positively to society.

4.2. Challenges and Opportunities

4.2.1. Challenges in Integrating Metacognition in Character Education

1) Lack of Teacher Understanding
   One of the primary challenges in integrating metacognition into character education is the lack of teacher understanding and training. Many educators are not familiar with metacognitive strategies and how to effectively incorporate them into their teaching practices. This lack of knowledge can hinder the successful implementation of metacognitive approaches in the classroom (Veenman et al., 2006).

2) Resource Limitations
   Schools often face limitations in resources, including time, funding, and materials, which can affect the ability to integrate metacognitive strategies effectively. Developing and implementing comprehensive character education programs that include metacognitive components require significant investment, which may not always be available (Desimone & Garet, 2015).

3) Curriculum Constraints
   The existing curriculum may not always allow for the incorporation of metacognitive strategies, particularly in systems with rigid educational frameworks. Teachers may find it challenging to balance the demands of the curriculum with the need to integrate character education and metacognitive practices (Paris & Winograd, 2013).

4) Diverse Student Needs
   Addressing the diverse needs of students can be challenging when implementing metacognitive strategies. Students come from varied cultural, social, and economic backgrounds, which can influence their receptiveness to character education and metacognitive approaches (Nieto, 2001).

4.2.2. Opportunities for Enhancing Metacognition in Character Education

1) Professional Development Programs
   Developing professional development programs focused on metacognition and character education can equip teachers with the necessary skills and knowledge. Such programs can provide practical strategies for integrating metacognitive practices into everyday teaching and help teachers understand the benefits of these approaches (Moshman, 2018; Schraw & Dennison, 1994)

2) Collaborative Learning Environments
   Creating collaborative learning environments where teachers can share best practices and support each other in implementing metacognitive strategies can enhance the effectiveness

of character education. Collaboration can lead to the development of innovative approaches and foster a community of practice among educators (Vygotsky, 1978).

3) Use of Technology
Leveraging technology can provide new opportunities for integrating metacognitive strategies in character education. Digital tools and platforms can offer interactive and engaging ways for students to practice self-reflection, goal setting, and self-assessment (Azevedo, 2005).

4) Holistic Curriculum Design
Designing a holistic curriculum that incorporates metacognitive strategies across different subjects can ensure that character education is not isolated but integrated throughout the learning experience. This approach can help students see the relevance of metacognitive practices in various contexts and promote a more comprehensive understanding of ethical behavior (Bransford et al., 2001).

5) Research and Evidence-Based Practices
Encouraging research on the impact of metacognitive strategies in character education can provide valuable insights and evidence to support their integration. Evidence-based practices can inform policy decisions and guide the development of effective programs that enhance both moral development and academic performance (Durlak et al., 2010).

6) Policy Support
Advocating for policy support at the institutional and governmental levels can create a conducive environment for the integration of metacognitive strategies in character education. Policies that prioritize character education and allocate resources for professional development and program implementation can facilitate widespread adoption (Zins & Elias, 2007).

Integrating metacognition in character education presents both challenges and opportunities. While the lack of teacher understanding, resource limitations, curriculum constraints, and diverse student needs pose significant obstacles, there are numerous opportunities to enhance the effectiveness of character education through professional development, collaborative learning, technology, holistic curriculum design, research, and policy support. By addressing these challenges and leveraging the available opportunities, educators can create more robust and impactful character education programs that foster the moral and ethical development of students.

5. Discussion
5.1. Connection with Existing Theories
The findings of this review align with several theoretical frameworks in education and psychology. For instance, Vygotsky's social development theory emphasizes the role of self-regulation and reflective thinking in learning (Vygotsky, 1978). Metacognitive strategies, by promoting self-awareness and self-regulation, directly support this theory by helping students to internalize and apply moral values in social contexts.

Furthermore, Bandura's social cognitive theory, which highlights the importance of self-efficacy and self-regulation, is supported by the evidence that metacognitive practices enhance

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students' ability to monitor and control their behavior (Wood & Bandura, 1989). By setting goals and assessing their progress, students build self-efficacy, which is critical for both academic and moral development.

5.2. Implications for Character Education

The integration of metacognitive strategies in character education has several important implications:

1) Holistic Development

   By fostering both academic and moral development, metacognitive strategies contribute to the holistic development of students. This dual focus prepares students not only for academic success but also for ethical decision-making in their personal and professional lives (Bransford et al., 2001).

2) Teacher Training and Development

   The challenges identified highlight the need for targeted professional development programs that equip teachers with the knowledge and skills to implement metacognitive strategies effectively. Such training should focus on practical applications and provide ongoing support to ensure successful integration (Moshman, 2018; Schraw & Dennison, 1994).

3) Curriculum Design

   The findings suggest that curriculum designers should consider integrating metacognitive strategies across subjects to ensure that character education is a continuous and comprehensive process. This approach can help students apply metacognitive practices in various contexts, reinforcing their understanding and internalization of moral values (Paris & Winograd, 2013).

4) Policy Support

   To overcome resource limitations and other implementation challenges, policy support at the institutional and governmental levels is crucial. Policies that prioritize character education and allocate resources for training and program development can facilitate the widespread adoption of metacognitive strategies (Zins & Elias, 2007).

Previous research supports the findings of this review. For example, a study demonstrated that the integration of self-reflection and goal-setting strategies in a character education program led to improved student behavior and a more positive school climate (Avargil et al., 2018). Similarly, previous research found that incorporating metacognitive strategies in Indonesian schools enhanced students' moral development and engagement, aligning with the nation's educational goals (Retnawati et al., 2018; Susilo et al., 2022).

Additionally, Tangney et al. reported that students who regularly engaged in self-monitoring and self-assessment showed higher academic performance and better interpersonal relationships, reinforcing the dual benefits of metacognitive practices in character education (Tangney et al., 2018).

The integration of metacognition in character education offers significant benefits for students' moral and academic development. While challenges exist, targeted professional development, holistic curriculum design, and policy support can facilitate the effective implementation of metacognitive strategies.

6. Conclusion

This literature review has emphasized the critical role of metacognition in character education, particularly in fostering the moral and ethical development of students. Metacognitive strategies such as self-reflection, goal-setting, and self-assessment enable students to internalize virtues like responsibility and empathy, empowering them to make principled decisions and navigate social complexities effectively. Integrating these strategies into educational practices not only enhances academic performance but also cultivates a supportive learning environment conducive to social-emotional growth.

Moving forward, practical recommendations include prioritizing comprehensive teacher training programs focused on the effective implementation of metacognitive techniques. Additionally, embedding metacognitive practices throughout curricula can ensure that ethical values are consistently reinforced across various subjects. Advocating for supportive policies at institutional and governmental levels is essential to sustain these efforts over time. Future research should delve deeper into assessing the long-term impacts of metacognitive interventions across diverse cultural contexts and explore innovative approaches to maximize their effectiveness in nurturing well-rounded individuals prepared for future challenges.

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8. Declaration of Conflicting Interests

The author has declared no potential conflicts of interest concerning this article's research, authorship, and/or publication.

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