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Explicating the Educational Implications of Caring Thinking from the Perspective of Matthew Lipman

ABSTRACT

This study aimed to identify and interpret the educational implications of the philosophical foundations of Matthew Lipman's caring thinking framework using Frankena's deductive method. This qualitative study employed a systematic literature review and semi-structured expert interviews to extract the philosophical components, indicators, and conceptual structures associated with caring thinking. Data sources included peer-reviewed publications, educational research documents, and works authored by Lipman and leading scholars in the Philosophy for Children (P4C) tradition. Interviews were conducted with specialists in philosophy of education, P4C practitioners, and curriculum experts selected through purposive sampling. Data analysis followed an iterative coding process in which extracted concepts were categorized into components and indicators and subsequently interpreted through Frankena's ethical deduction framework, which includes conceptual analysis, examination of principles and assumptions, argument evaluation, and inferential conclusion building. Inferential analysis revealed that caring thinking comprises five main components—acceptance and attention to diversity, interpersonal communication development, respect for self and others, enhancement of self-awareness, and cultivation of communication and problem-solving skills. Deductive interpretation indicated that each component possesses distinct philosophical underpinnings and educational implications, including the promotion of reflective reasoning, ethical sensitivity, collaborative dialogue, and social responsibility. The model further demonstrated that caring thinking functions as an integrative construct linking cognitive, emotional, and interpersonal dimensions within educational practice. Overall, the inferential framework confirmed that caring thinking embodies both normative and pedagogical significance, making it essential for contemporary curriculum design and learner development. The study concludes that caring thinking, as conceptualized by Lipman, represents a multidimensional philosophical foundation with substantial educational relevance and should be systematically integrated into instructional design, teacher preparation, and curriculum policy to promote holistic learner development.

Keywords: Caring Thinking; Philosophy for Children; Matthew Lipman; Frankena's Method; Educational Implications; Reflective Thinking; Moral Education; Communication Skills; Self-Awareness; Curriculum Development

Introduction

The growing need for educational systems to cultivate reflective, dialogical, and ethically grounded forms of reasoning has placed renewed emphasis on Matthew Lipman's framework of Philosophy for Children (P4C), particularly his concept of "caring thinking," which has become a central axis in contemporary philosophical-educational discourse. In the last decade, scholars have highlighted that the development of reasoning in schools can no longer be confined to logical proficiency alone but must incorporate emotional, interpersonal, and ethical dimensions that prepare learners for complex, rapidly changing social realities. This shift reflects a broader international trend in education toward integrating cognitive, social, and moral competencies, a trajectory reinforced by empirical and theoretical contributions across multiple disciplines (1-3). Lipman's

work has repeatedly emphasized that thinking is not merely a technical process but a deeply human endeavor in which students must learn how to reason with sensitivity, openness, and consideration for both themselves and others (4). This perspective introduces the idea that caring thinking is not supplementary to critical and creative thinking but is instead a pillar of human thought that ensures intellectual inquiry is grounded in empathy, responsibility, and community building.

In contemporary educational research, caring thinking has become increasingly relevant due to a growing recognition that many pedagogical challenges—such as student disengagement, lack of empathy, and limited social connectedness—can be traced to an imbalance between cognitive and affective forms of thinking. Studies conducted in varied cultural and instructional contexts demonstrate the value of integrating caring thinking into classroom practices. Research in China, for example, shows that teaching strategies designed to foster critical thinking are strengthened when students are simultaneously encouraged to attend to emotions, relationships, and context (5, 6). Similarly, work in Turkey and Europe has demonstrated that reflective, dialogical instruction enhances not only students' reasoning but also their creativity, communication skills, and collaborative problem-solving abilities (7, 8). These findings resonate with earlier work on the P4C program, showing that engaging students in philosophical dialogue encourages both interpersonal understanding and intrapersonal growth, making caring thinking foundational to holistic educational experiences (9, 10).

Parallel to these developments, extensive scholarship documents how Lipman's educational philosophy continues to influence contemporary conceptions of democratic education, human development, and ethical reasoning. Sharp's interpretation of caring thinking as the "other dimension" of reasoning underscores its normative and relational aspects, positioning it as the moral anchor of the P4C curriculum (2). Franzini Tibaldeo deepens this argument by demonstrating that Lipman and Sharp's pedagogical vision aims to cultivate humanity, empathy, and responsibility within community-of-inquiry settings (11). Oliveira extends this perspective by arguing that the philosophical-educational revolution envisioned by Lipman and Sharp offers a critical alternative to standardized, test-driven models of schooling, calling instead for educational environments in which students learn to reason with compassion, respect, and social awareness (12). Collectively, these contributions affirm that caring thinking serves not merely as an instructional aim but as a broader ethical and cultural orientation capable of renewing educational systems.

Research in Iran and related cultural contexts echoes these global insights and highlights the foundational significance of caring thinking for personal, interpersonal, and moral development. Tavakoli's examination of caring thinking within Islamic educational texts demonstrates how Lipman's approach can be harmonized with cultural and religious traditions that emphasize empathy, reflection, and community responsibility (13). Similarly, Eftekhari's evaluation of caring thinking in national curriculum content reveals that although some components of caring thinking appear in official curricular documents, they remain underdeveloped and insufficiently operationalized, signaling a need for further integration (14). Hosseini's comparative analysis of Merleau-Ponty and Lipman likewise underscores the centrality of embodied experience and relational understanding in forming educational models that honor the complexity of human subjectivity (15). These discussions reinforce that caring thinking represents both a pedagogical method and a philosophical stance that must be articulated more explicitly within Iranian educational theory and practice.

Beyond theoretical analyses, empirical studies confirm the positive developmental outcomes associated with caring thinking. Hedayati's development of a caring thinking assessment tool provides evidence that students' reflective, emotional, and ethical capacities can be measured reliably, demonstrating that caring thinking is not an abstract construct but a tangible educational objective with assessable indicators (16). International studies similarly document improvements in students' critical and creative thinking, classroom behavior, and personal well-being when caring thinking is embedded within instructional design (17, 18). Cam's work on thinking-as-method highlights how philosophical dialogue fosters mindful

attentiveness, interpersonal understanding, and inquiry-driven reasoning (3). Michaud's conceptualization of P4C as a form of spiritual education also contributes to this discourse by framing caring thinking as a pathway toward deeper personal meaning, ethical sensitivity, and social engagement (19). These findings collectively show that caring thinking extends beyond cognitive enrichment; it encompasses emotional, ethical, and social dimensions essential for preparing students to thrive in diverse and challenging environments.

Additional research shows how caring thinking influences learners' motivation, resilience, and identity formation. For example, Mardani's qualitative exploration of adult learners' experiences in second-language acquisition environments reveals that reflective, empathetic engagement significantly shapes perseverance, emotional regulation, and self-confidence (20). Meymanatabadi's comparative analysis of East Asian education systems suggests that these systems excel partly because they cultivate collective responsibility, respect, and social awareness—elements closely aligned with caring thinking (21). These insights provide empirical justification for embedding caring thinking within national educational reforms aimed at strengthening social cohesion, identity development, and civic responsibility.

In contemporary global discussions on heritage, citizenship, and technological change, caring thinking is increasingly recognized as a crucial factor in shaping ethical attitudes toward communities and the environment. Konstandinos demonstrates that Lipman's caring thinking framework can guide responsible engagement with industrial and technological heritage by fostering attitudes of stewardship, respect, and ethical reflection (22). This broader applicability emphasizes that caring thinking is not confined to classrooms; it extends to cultural, technological, and civic domains where thoughtful, responsible action is essential.

Furthermore, caring thinking aligns closely with emerging research in problem-solving and instructional design. Studies in cognitive psychology show that higher-order reasoning, including ethical and reflective components, enhances learners' long-term retention and performance in complex tasks. For instance, Ruitenberg's research demonstrates that problem-solving approaches grounded in active engagement outperform passive example-study models, especially when learners must navigate ambiguous or multifaceted challenges (23). When interpreted through Lipman's framework, these findings underscore that caring thinking—through attention, reflection, and collaborative inquiry—supports deeper and more sustained learning outcomes.

Finally, in technologically enriched learning environments, caring thinking serves as a counterbalance to the potential depersonalization of digital interaction. Studies on artificial intelligence integration in design-based learning reveal that reflective, collaborative, and empathetic processes significantly enhance students' creativity and engagement, suggesting that caring thinking can harmonize humanistic values with emerging educational technologies (7). As digital transformation accelerates globally, this harmonization becomes increasingly critical to ensuring that innovation does not eclipse ethical and interpersonal considerations.

Taken together, the extensive theoretical, empirical, and interdisciplinary research establishes that caring thinking represents a comprehensive philosophical-educational framework with profound implications for curriculum design, instructional practice, moral education, and human development. Despite substantial global interest, however, there remains a need for systematic clarification of the philosophical foundations and educational implications of caring thinking from Lipman's perspective, particularly within contexts where curricular integration is partial or inconsistent.

Therefore, the present study aims to explicate the philosophical foundations of caring thinking from Matthew Lipman's perspective and derive its educational implications.

Methods and Materials

The present study employed a fundamental qualitative research design aimed at explicating the philosophical foundations of caring thinking from Matthew Lipman's perspective and deriving its educational implications. The inquiry was cross-sectional in its temporal structure and combined two primary qualitative strategies: meta-synthesis of existing literature and semi-structured interviews with academic experts. The research design was structured in three progressive phases. First, a systematic meta-synthesis was conducted to identify, extract, and synthesize the philosophical underpinnings of caring thinking as presented in scholarly works. This phase relied on a comprehensive systematic review of local and international sources, guided by established protocols that ensured transparency and rigor in the selection and synthesis of evidence.

The second phase involved semi-structured interviews with experts in philosophy of education who were purposefully selected based on academic rank, scholarly contributions, and minimum professional experience. These experts were drawn from Iranian universities during the years 2024–2025 and were selected because of their specialized expertise in Lipman's philosophical foundations of thinking and in philosophy-for-children-related scholarship. Twenty-five participants were ultimately interviewed, with the number determined by the principle of theoretical saturation, which was reached when interviews 26 and 27 no longer yielded new codes or conceptual insights.

The third phase involved applying Frankena's practical-deductive model to derive educational implications from the philosophical propositions identified in earlier phases. This phase did not involve recruiting additional participants but rather relied analytically on the synthesized theoretical propositions and the conceptual themes emerging from expert interviews.

Data collection drew upon three integrated qualitative tools that corresponded to the three methodological phases of the study. The first tool was document analysis within a systematic meta-synthesis framework. This process entailed the exhaustive collection and critical examination of books, peer-reviewed articles, dissertations, and theoretical works published between 1391–1404 in Iran and 2003–2025 internationally. Scientific databases such as IranDoc, SID, MagIran, Civilica, Web of Science, Scopus, PubMed, ERIC, JSTOR, ScienceDirect, Springer, Wiley Online Library, and Google Scholar were systematically searched. Studies were screened, selected, and synthesized using the PRISMA protocol, enabling a transparent flow from identification to inclusion or exclusion. Extracted texts were then subjected to qualitative content analysis to form the preliminary conceptual components of Lipman's caring thinking.

The second data collection tool consisted of semi-structured interviews. Five core questions were designed based on the research objectives, focusing respectively on ontology, anthropology, epistemology, axiology, and educational implications of caring thinking in Lipman's framework. Follow-up questions were added when necessary to deepen understanding and explore expert perspectives. Interviews were audio-recorded with consent, conducted in participants' workplaces, and lasted between 30 and 90 minutes. Verbatim transcripts formed the basis for subsequent coding and thematic analysis.

The third tool was Frankena's deductive-inferential framework, which operated as an analytical instrument rather than an empirical one. In this phase, normative propositions (values, philosophical assumptions) were logically integrated with descriptive propositions (conditions of educational practice) to derive educational implications through practical reasoning. Extracted statements from the meta-synthesis and interviews served as the textual corpus for inferential analysis, enabling the formulation of overarching educational categories such as respect for diversity, interpersonal attention, self-awareness development, and communication skills enhancement.

Data analysis followed a multi-layered qualitative procedure using both inductive and deductive strategies. In the first phase, the meta-synthesis dataset was analyzed using qualitative content analysis supported by MAXQDA software. Coding proceeded through three stages aligned with thematic analysis principles: basic themes representing initial conceptual codes,

organizing themes grouping related concepts into meaningful clusters, and overarching themes that reflected broad and integrative interpretations. These themes shaped the conceptual map of Lipman's caring thinking as represented in the literature.

The second analytic phase focused on interview data. Transcribed interviews were coded theoretically to identify explicit statements, underlying meanings, and recurring patterns. Reliability was ensured through repeated coding, comparison of codes from different time intervals (test-retest reliability), and inter-coder agreement, which yielded acceptable reliability coefficients. Credibility, dependability, confirmability, and transferability were strengthened using prolonged engagement, member checking, peer debriefing, triangulation of data sources, and maintenance of detailed audit trails.

The third analytic phase employed Frankena's model. Here, philosophical statements extracted from earlier phases were organized, assessed, and compared to identify logical relationships between values and educational goals. Through practical syllogism, normative and descriptive elements were combined to infer educational implications that were conceptually coherent and pedagogically applicable. The final step involved synthesizing all phases to produce a set of core educational implications, including fostering respect for self and others, encouraging interpersonal attentiveness, promoting diversity awareness, enhancing communication and problem-solving skills, and strengthening reflective self-awareness.

Findings and Results

Table 1 presents the results of the coding process derived from the systematic literature review, conducted to identify the dimensions, components, and indicators of the educational implications embedded in the philosophical foundations of caring thinking from Matthew Lipman's perspective. Through an extensive meta-synthesis of national and international scholarly sources, a set of recurring conceptual patterns emerged that illuminate how caring thinking manifests within educational contexts. The extracted codes were organized into five overarching components—acceptance and attention to diversity, interpersonal communication, respect for self and others, development of self-awareness, and communication and problem-solving skills—each supported by clearly defined indicators and grounded in documented academic sources. These structured findings form the conceptual basis for subsequent qualitative analyses and for the deductive inference of educational implications later in the study.

Table 1. Extracted Codes from the Systematic Literature Review for Identifying Dimensions, Components, and Indicators of Educational Implications of the Philosophical Foundations of Caring Thinking from Lipman's Perspective

Component	Indicator	Source
Acceptance and Attention to Diversity	Attention to individual needs and experiences	Konstantines (2023), Lipman (2017)
	Facilitating healthy communication processes	Alvarez (2023), Ashrafi (2015)
	Integration of reflection and contemplation	Alicour (2016), Afshordi (2014)
	Using diverse strategies for problem-solving	Kastanidens (2023), Sheikhi, Sajjadi, Sheikhi (2020)
Interpersonal Communication	Enhancing effective communication	Ashrafi (2015), Bagheri-Noeparast (2015)
	Attending to individual needs and emotions	Alvarez (2023), Bagheri-Noeparast (2015)
	Facilitating positive interaction processes	Alicour (2016), Lipman (2017)
	Developing communication skills	Franzini Tibaldo (2023), Ashrafi (2015)
Respect for Self and Others	Acceptance and consolidation of personal identity	Kastanidens (2023), Afshordi (2014), Bagheri-Noeparast (2015)
	Developing self-confidence	Alvarez (2023), Afshordi (2014), Bagheri-Noeparast (2015)
	Respecting rights and personal values	Franzini Tibaldo (2023), Sheikhi, Sajjadi, Sheikhi (2020)

Development of Self-Awareness	Facilitating healthy communication processes	Alvarez (2023), Franzini Tibaldo (2023), Sheikhi, Sajjadi, Sheikhi (2020)
	Attending to one's own perspectives and emotions	Alicour (2016), Lipman (2017)
	Developing analytical and forward-thinking abilities	Franzini Tibaldo (2023), Bagheri-Noeparast (2015)
	Facilitating self-interaction processes	Sheikhi, Sajjadi, Sheikhi (2020), Bagheri-Noeparast (2015)
Development of Communication and Problem-Solving Skills	Using feedback and experiences	Franzini Tibaldo (2023), Sheikhi, Sajjadi, Sheikhi (2020)
	Warm and intimate communication	Lipman (2017), Afshordi (2014)
	Using effective communication techniques	Alvarez (2023), Sheikhi, Sajjadi, Sheikhi (2020)
	Developing problem-solving skills	Alicour (2016), Franzini Tibaldo (2023)
Evaluation and feedback		Franzini Tibaldo (2023), Bagheri-Noeparast (2015)

Table 1 illustrates that the literature consistently identifies five major components that frame the educational implications of caring thinking: diversity awareness, interpersonal communication, respect for self and others, self-awareness development, and communication and problem-solving competence. Each component is supported by several indicators—such as attention to personal needs, facilitation of healthy interactions, consolidation of identity, analytical growth, and the use of effective communication techniques—demonstrating the multifaceted nature of caring thinking within Lipman's philosophy. These indicators reveal that caring thinking extends beyond cognitive processes to encompass emotional, ethical, interpersonal, and reflective dimensions essential for holistic education. The variety of sources represented, including both international studies and Iranian academic work, underscores the conceptual depth and broad applicability of Lipman's ideas. Collectively, these findings provide a robust theoretical foundation for deriving the educational implications explored in subsequent phases of the research.

Table 2. Extracted Codes from Expert Interviews for Identifying Dimensions, Components, and Indicators of the Educational Implications of the Philosophical Foundations of Caring Thinking from Matthew Lipman's Perspective

Component	Indicator	Meaning Unit	Interview Codes
Acceptance and Attention to Diversity	Attention to individual needs and experiences	“Paying attention to personal needs and experiences means understanding what each person requires and what they have gone through.” “When we become familiar with others' needs and experiences, we can interact with them more effectively.” “Every human has a story worth listening to, and we must learn from them.”	i4, i9, i13
	Facilitating healthy communication processes	“Facilitating healthy communication means helping create positive interactions.” “Creating a space for healthy communication allows individuals to feel safer and more confident.” “Healthy relationships help us communicate more effectively with colleagues and students.”	i1, i5, i9
	Integration of reflection and contemplation	“Combining reflection and contemplation means thinking deeply and then rethinking that process.” “We must take time to analyze our experiences and learn from them.” “Reflection helps us discover new patterns and methods for solving problems.”	i14, i25
	Development of active listening skills	“Active listening means truly hearing what others say.” “It allows us to understand others' perspectives and emotions.” “Real relationships require listening, not just speaking.”	i5, i10, i17
	Using diverse strategies for problem-solving	“Using diverse strategies means applying different methods to solve problems.” “We cannot always rely on one solution; creativity is needed.” “Variety in approaches helps us choose the best option.”	i1, i10, i24
	Enhancing effective communication	“Enhancing effective communication improves how we express messages.” “Optimized communication allows better collaboration and results.”	i3, i6
	Facilitating positive interaction processes	“Facilitating positive interactions helps build good relationships.” “Positive relations energize us and keep us motivated.”	i15, i18
	Developing communication skills	“Developing communication skills means learning how to speak better with others.” “Knowing various communication techniques helps us interact appropriately in different situations.”	i7, i14

Respect for Self and Others	Attending to non-verbal communication	“Understanding body language and facial expressions is essential.” “What is not said can be as important as words.” “Recognizing non-verbal cues helps us act more accurately.”	i2, i8, i21
	Acceptance and consolidation of personal identity	“Accepting oneself as one is leads to increased self-confidence.” “Self-acceptance improves our ability to connect with others.”	i19, i20
	Developing self-confidence	“Self-confidence means believing in our abilities.” “Confidence helps us face challenges without fear.”	i16, i23
	Respecting personal rights and values	“Respecting personal rights means valuing others’ feelings and opinions.” “Respect for boundaries leads to effective communication.” “Accepting others’ beliefs and dignity without judgment strengthens relationships.”	i3, i12, i22
	Attending to sensitivities and personal boundaries	“Understanding that everyone has boundaries helps improve communication.” “Awareness of others’ sensitivities increases relational support and trust.”	i4, i6, i11
	Facilitating healthy communication processes	“Helping establish healthy communication leads to healthier relationships.” “Creating space for dialogue helps everyone feel comfortable.” “Healthy communication leads to better decisions and cooperation.”	i6, i15, i19
Development of Self-Awareness	Attending to one’s own perspectives and emotions	“Understanding our emotions and thoughts helps us know ourselves better.” “Self-awareness improves both self-understanding and understanding of others.”	i13, i18, i21
	Facilitating interaction with oneself	“Learning how to treat ourselves well enhances emotional well-being.” “Kindness toward oneself supports better interactions with others.”	i5, i16, i17
	Attending to personal strengths and weaknesses	“Identifying strengths and weaknesses supports growth and progress.” “Focusing on strengths motivates us to move forward.”	i3, i9, i18
	Using feedback and experiences	“Listening to others’ feedback helps us learn.” “Feedback motivates improvement and boosts confidence.” “Feedback is key to success.”	i18, i22, i23
Development of Communication and Problem-Solving Skills	Warm and intimate communication	“Warm communication helps create friendly, close relationships.” “Intimate relations allow us to express ourselves without fear.”	i7, i12, i16
	Developing problem-solving skills	“Problem-solving skills help us act effectively in life situations.” “These skills allow us to manage challenging conditions.”	i1, i5, i19
	Evaluation and feedback	“Evaluation helps identify strengths and weaknesses.” “Feedback supports learning from mistakes and performing better in the future.”	i8, i20

Table 2 synthesizes the qualitative insights gained from expert interviews, revealing five major components that constitute the educational implications of Lipman’s caring thinking: acceptance and attention to diversity, interpersonal communication, respect for self and others, development of self-awareness, and communication and problem-solving skills. Each component is supported by multiple indicators and rich meaning units, demonstrating that experts consistently emphasized both emotional and cognitive dimensions of caring thinking. Their statements highlighted essential capacities such as active listening, understanding personal and others’ experiences, recognizing non-verbal cues, supporting identity formation, and employing diverse strategies for reflection and problem-solving. Additionally, interview data repeatedly underscored the centrality of empathy, healthy communication, self-understanding, and relational sensitivity as foundational elements of caring thinking. Collectively, these coded themes confirm that caring thinking is not merely an intellectual process but a holistic pedagogical orientation grounded in ethical interaction, reflective awareness, and interpersonal competence.

Table 3. Interpretation of Components and Indicators of the Educational Implications of the Philosophical Foundations of Caring Thinking from Matthew Lipman's Perspective Using Frankena's Deductive Method

Component	Indicator	Concept Analysis	Examination of Principles and Assumptions	Argument Analysis	Conclusion
Acceptance and Attention to Diversity	Attention to individual needs and experiences	Diversity is a rich source for learning.	Individual needs and experiences must be considered in instructional design.	Learners who understand their needs and experiences learn more effectively.	Creating an inclusive and accepting learning environment.
	Facilitating healthy communication processes	Healthy communication supports effective learning.	Healthy communication forms the basis of positive relationships.	Effective communication reduces conflicts.	Strengthening positive and constructive interactions in educational settings.
	Integration of reflection and contemplation	Reflection helps learners better understand themselves.	Reflection enables deeper comprehension of learning experiences.	Reflection improves learning processes.	Encouraging critical thinking and self-awareness.
	Developing active listening skills	Active listening supports effective communication.	Active listening leads to better understanding of others' needs and emotions.	Students with active listening skills are more successful in interactions.	Improving the quality of communication and social interactions.
	Using diverse strategies for problem-solving	Strategy diversity supports problem-solving.	Using diverse strategies fosters creativity.	Students who use multiple strategies succeed more in solving problems.	Fostering creativity and critical thinking.
Interpersonal Communication	Enhancing effective communication	Effective communication strengthens human relationships.	Effective communication creates a positive classroom atmosphere.	Effective communication improves learning and social success.	Establishing a positive and collaborative learning environment.
	Attending to individual needs and emotions	Attention to individual needs and emotions is essential for learning.	Respect for individual needs builds mutual respect.	Emotional responsiveness increases motivation and engagement.	Creating a respectful and accepting environment.
	Facilitating positive interaction processes	Positive interactions support effective learning.	Positive interactions build healthy and meaningful relationships.	Positive interactions reduce conflict and increase empathy.	Strengthening social and educational relationships.
	Developing communication skills	Communication skills underpin effective interaction.	Developing these skills strengthens empathy and cooperation.	Strong communication skills support academic and social success.	Cultivating communication and social skills in students.
	Attending to non-verbal communication	Non-verbal cues play a major role in communication.	Body language and facial expression are essential communication elements.	Understanding non-verbal messages enhances communication.	Improving communication through sensitivity to non-verbal cues.
Respect for Self and Others	Acceptance and consolidation of personal identity	Respect for identity enhances self-esteem.	Acceptance of personal identity strengthens dignity.	Individuals who accept their identity succeed socially.	Creating a respectful and value-driven environment for personal identities.
	Developing self-confidence	Self-confidence supports learning and personal growth.	Confidence allows individuals to participate in challenges.	Confident learners show greater motivation.	Increasing motivation and engagement in learning.
	Respecting personal rights and values	Respect for personal rights creates safety.	Respect for personal values enhances	Respect reduces conflict and increases empathy.	Creating a safe and supportive

			positive relationships.	educational environment.
Development of Self-Awareness	Attending to sensitivities and personal boundaries	Understanding boundaries improves communication.	Respect for boundaries builds a respectful atmosphere.	Strengthening mutual respect and healthy relationships.
	Facilitating healthy communication processes	Healthy communication supports learning and growth.	It strengthens collaboration and empathy.	Establishing a positive space for learning and development.
	Attending to one's own perspectives and emotions	Self-awareness supports personal growth.	Awareness of thoughts and emotions strengthens understanding.	Improving life quality and personal satisfaction.
	Developing analytical and forward-thinking abilities	Critical thinking improves learning.	Analytical abilities deepen understanding.	Cultivating critical and creative thinking skills.
	Facilitating interaction with oneself	Self-interaction supports self-knowledge and growth.	Reflecting on strengths and weaknesses strengthens identity.	Increasing self-awareness and personal capability.
	Attending to strengths and weaknesses	Knowing one's strengths and weaknesses supports improvement.	Awareness enhances learning processes.	Strengthening self-awareness and performance.
Development of Communication and Problem-Solving Skills	Using feedback and experiences	Feedback supports learning and improvement.	Experiences serve as learning resources.	Creating a culture of continuous learning and improvement.
	Warm and intimate communication	Warm communication strengthens relationships.	It fosters empathy and cooperation.	Creating a warm and supportive classroom environment.
	Using effective communication techniques	Effective techniques improve communication quality.	Techniques enhance influence and clarity.	Developing communication competence and influence.
	Developing problem-solving skills	Problem-solving helps manage challenges.	It fosters creativity and critical thinking.	Increasing decision-making and problem-solving capability.
	Evaluation and feedback	Evaluation improves learning.	It identifies strengths and weaknesses.	Establishing a space for continuous learning and growth.

Table 3 demonstrates how the components and indicators of caring thinking, grounded in Lipman's philosophical framework, were systematically interpreted using Frankena's deductive method. The table reveals that each indicator emerges from conceptual analyses, supported by underlying educational principles and justified through logical argumentation. This method clarifies how caring thinking promotes inclusive learning, strengthens communication, reinforces respect for identity and personal boundaries, cultivates self-awareness, and enhances both communication and problem-solving abilities. The integration of principles, assumptions, and argument analyses across all components shows that caring thinking is deeply connected to ethical learning processes, reflective self-development, and collaborative educational environments. Ultimately, the table concludes that fostering caring thinking creates learning spaces that are empathetic, critically oriented, cooperative, and developmentally supportive for all learners.

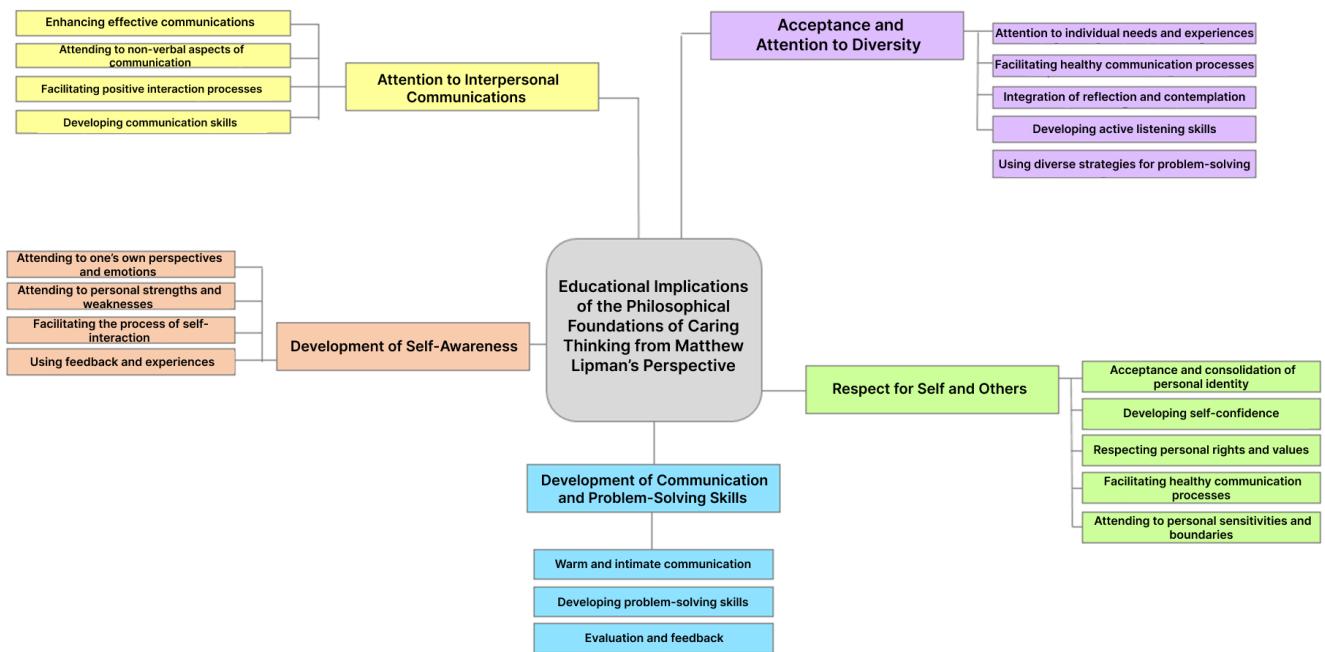


Figure 1. Final Conceptual Model

Discussion and Conclusion

The findings of this study provide strong evidence that the philosophical foundations of Matthew Lipman's caring thinking framework encompass a coherent set of educational implications that extend across cognitive, emotional, interpersonal, and ethical dimensions. The results showed that caring thinking, as conceptualized in this study, consists of five primary components—acceptance and attention to diversity, strengthening interpersonal communication, respect for self and others, development of self-awareness, and the cultivation of communication and problem-solving skills. These results closely align with theoretical claims made in the P4C literature that caring thinking is an essential complement to critical and creative thinking in shaping well-rounded learners who are intellectually capable, socially responsive, and ethically grounded (1, 2). The present study expands on these arguments by demonstrating that caring thinking is supported by identifiable behavioral indicators, conceptual meanings, and philosophical principles that can be systematically analyzed using Frankena's deductive method.

One of the central results was the strong emphasis on diversity awareness, individualized experiences, and reflective interaction as key pillars of caring thinking. Participants consistently highlighted that understanding individual needs and fostering reflective practices enhance learners' capacity for self-regulation and empathetic engagement. These findings align with earlier work showing that reflective and dialogical thinking helps learners articulate personal perspectives and build meaningful relationships (3, 14). Similarly, empirical studies demonstrating improved motivation and emotional resilience in learning environments that emphasize reflective engagement confirm the significance of reflection and diversity acknowledgment (20). Within the P4C framework, such reflective processes are deeply tied to the cultivation of moral and emotional sensitivity, a view that Sharp conceptualizes as foundational to the "other dimension" of thinking (2). The present results strongly support this position by showing that students' openness to diverse viewpoints and self-reflective abilities form essential conditions for meaningful educational engagement.

The findings also identified the facilitation of interpersonal communication as a major dimension of caring thinking. Interviewees emphasized active listening, recognition of non-verbal communication, and the development of constructive interactive practices. These insights correspond with global literature demonstrating that philosophical dialogue enhances communication, collaboration, and conflict resolution skills (6, 8). Research on culturally diverse educational settings further illustrates that active listening and interpersonal sensitivity foster supportive learning communities (17). The importance of relational dialogue in educational contexts is a recurring theme in Lipman's work, where he notes that caring thinking enables individuals to balance logical inquiry with emotional awareness and interpersonal responsiveness (4). This study reinforces those claims, showing that students' communication skills develop not only through instructional guidance but through participation in relational, caring-centered learning environments.

Respect for self and others emerged as another major outcome, underscoring the significance of identity formation, personal boundaries, and interpersonal ethics within the caring thinking model. Participants described respect as the foundation for healthy communication, emotional safety, and mutual understanding. This finding is consistent with philosophical and empirical studies showing that caring thinking contributes to moral development, ethical sensitivity, and stronger social bonds (9, 10). Additionally, studies from spiritual and cultural education contexts highlight the value of caring-oriented pedagogy for moral identity, empathy, and responsibility (13, 19). The present study builds on this evidence by demonstrating how respect for self and others is operationalized in classroom practices through identity acceptance, empathy, and acknowledgment of personal values and boundaries. These findings support the claim that caring thinking is not simply a cognitive skill but a holistic and ethical orientation toward oneself and society.

Another critical dimension revealed through the analysis is the development of self-awareness. Interviewees highlighted that self-awareness includes attention to personal emotions, recognition of strengths and weaknesses, and the ability to use feedback constructively. These findings correspond with broader research indicating that reflective self-awareness supports critical reasoning, emotional regulation, and responsible decision-making (16). Lipman's philosophical framework consistently links self-awareness with the ability to engage in deeper inquiry, as students with heightened self-awareness are better equipped to articulate their thoughts, evaluate assumptions, and participate meaningfully in collaborative reasoning (1). Furthermore, comparative studies in global contexts show that educational systems emphasizing reflection and metacognition outperform others in cultivating both academic success and socio-emotional resilience (21). The present study confirms that self-awareness is a foundational aspect of caring thinking and a necessary condition for ethical, reflective, and responsible learning.

The results also revealed that caring thinking strongly supports communication and problem-solving skills. Interviewees emphasized the role of warm communication, exploration of diverse problem-solving strategies, and the use of continuous evaluation and feedback. These findings closely parallel research showing that dialogical and inquiry-based learning environments enhance students' abilities to analyze problems, reason collaboratively, and think creatively (7, 23). The link between caring thinking and problem-solving is reinforced by literature arguing that ethical sensitivity, empathy, and emotional understanding contribute significantly to learners' ability to navigate ambiguity and complexity in real-world contexts (22). International studies also report that learners exposed to philosophical dialogue demonstrate not only improved reasoning skills but enhanced socio-emotional competence, which further strengthens their capacity to address complex challenges (5, 12). The present findings extend these observations by illustrating how caring thinking shapes the processes through which learners collaborate, analyze, and evaluate solutions in educational environments.

Overall, the results strongly affirm that caring thinking is a multidimensional construct with extensive educational implications. It integrates cognitive, ethical, interpersonal, and reflective dimensions in ways that modern educational systems increasingly recognize as essential. The present study is consistent with earlier works showing that caring thinking embodies a

holistic approach to education that prepares learners not only for intellectual tasks but for socially responsible and emotionally engaged participation in their communities (15, 18). By systematically interpreting the philosophical foundations and educational implications through Frankena's method, this study contributes a structured framework that can guide curriculum design, teacher training, and policy development. Ultimately, the findings suggest that caring thinking should be considered a core element of education, particularly in environments seeking to balance cognitive rigor with ethical responsibility, social cohesion, and emotional well-being.

This study was conducted using qualitative methods, which inherently limit the generalizability of its findings because they rely heavily on participants' interpretations and contextual experiences. The selection of experts, while systematic, may not represent all perspectives relevant to caring thinking, especially those from diverse cultural, linguistic, or disciplinary backgrounds. Additionally, although the analysis was rigorous, the deductive framework may have constrained interpretation by emphasizing predefined philosophical categories, potentially limiting the emergence of alternative conceptual structures.

Future research should incorporate quantitative validation of the components, indicators, and implications identified in this study, particularly through large-scale surveys or experimental interventions. Longitudinal research would also be valuable for understanding how caring thinking develops over time and how it influences learners' academic, social, and emotional outcomes. Comparative studies across cultural and educational systems could provide deeper insights into how caring thinking functions in varied contexts and how social, cultural, or institutional structures shape its development and implementation.

Educational practitioners should prioritize integrating caring thinking into curriculum design by embedding reflective dialogue, empathy-based activities, and collaborative problem-solving into daily instruction. Teacher training programs should include modules that cultivate self-awareness, communication skills, and ethical sensitivity in educators. Schools should develop learning environments that support respectful dialogue, personal expression, and emotional safety, ensuring that caring thinking becomes an integral part of educational culture rather than a peripheral practice.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adhered in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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