

Exploring Theoretical and Conceptual Frameworks for the Enhancement of High-Order Thinking Skills through the Study of Thirukkural

Kartheiges Ponniah¹, Naina Mohamed Mohamed Safeek²

¹Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris (UPSI), Tanjung Malim, Perak, Malaysia, ²Department of Educational Psychology, Faculty of Education, University of Colombo, Sri Lanka

Email: kartheiges@fbk.upsi.edu.my, safeek@edpsy.cmb.ac.lk

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Abstract

Thirukkural, authored by Thiruvalluvar, is a timeless masterpiece of classical Tamil literature, renowned for its enduring wisdom. This study aims to construct theoretical and conceptual frameworks for enhancing high-order thinking skills through the study of Thirukkural. Thirukkural covers diverse topics, including ethics, morality, governance, and love, offering a unique opportunity to foster high-order thinking skills such as critical thinking, creative reasoning, ethical decision-making, and problem-solving. The theoretical framework is rooted in the Transfer of Learning theory, which explores how learners apply existing knowledge and skills in new contexts. Thirukkural serves as a cognitive catalyst, facilitating thematic exploration, close reading, comparative analysis, critical and creative thinking, problem solving, analytical thinking, and practical application. These cognitive domains are essential for the development of high-order thinking skills. The conceptual framework outlines a structured approach for cultivating high-order thinking skills through Thirukkural. It encompasses thematic exploration, close reading and analysis, comparative analysis, critical thinking, creative thinking, problem solving, analytical thinking, and practical application. By immersing learners in these domains, educators can empower them with cognitive tools that transcend classroom boundaries, nurturing intellectual growth and meaningful engagement in various life contexts.

Keywords: Classical Tamil Literature, High-Order Thinking Skills, Thirukkural, Transfer of Learning

Introduction

Thirukkural, written by Thiruvalluvar, often referred to simply as the Kural, is a timeless masterpiece of classical Tamil literature that stands as a testament to the enduring wisdom of its author. Thirukkural, a Tamil classic literature, which was written in 300 BCE is a didactic literature. Though Thirukkural comprises 1330 couplets which are organized into three sections and 133 chapters (Ramalingam & Navaneethakrishnan, 2022). The three sections are shortly called as Aram, Porul and Inbam. The Aram espouses best soul-evolving practices

in domestic and ascetic life. Porul deals acquiring money and other assets and making use of them profitably in terms of common good and through it catering to the evolution of the soul. Inbam deals with love, which in addition to physical closeness deals with affinity between to souls (Venkatachalam, 2015). Thirukkural covers a wide range of topics, including ethics, morality, governance, love, and life's myriad facets. Its succinct and insightful verses have transcended the boundaries of time and culture, earning it a revered place in the literary and philosophical heritage of the world.

The existing body of literature predominantly focuses on the literary and cultural significance of Thirukkural, with limited exploration into its pedagogical implications, particularly in fostering high-order thinking skills. This gap highlights the need for research that systematically examines the theoretical and conceptual frameworks underpinning the enhancement of critical thinking, creative reasoning, ethical decision-making, and problem-solving through the study of Thirukkural. Addressing this gap is crucial for leveraging Thirukkural's rich content to develop the cognitive abilities essential for navigating complex challenges in contemporary society.

Thirukkural's moral wisdom and cultural significance provide a unique opportunity to foster high-order thinking skills-critical thinking, creative reasoning, ethical decision-making, and problem-solving. This study is to develop the theoretical and conceptual frameworks for the enhancement of high-order thinking skills through the study of Thirukkural. This literature review aims to explore the existing theoretical and conceptual frameworks that underpin the enhancement of high-order thinking skills through the study of Thirukkural.

Aim of the Study

The aim of this research is to explore and elucidate the theoretical and conceptual frameworks that can be employed to enhance high-order thinking skills through the study of Thirukkural. Objectives are to explore and analyze the theoretical underpinnings that support the enhancement of high-order thinking skills through Thirukkural, to identify and categorize the essential cognitive skill domains that can be cultivated through the study of Thirukkural, and to investigate practical strategies and methodologies for effectively integrating Thirukkural into educational settings to enhance high-order thinking skills.

Literature Review

Thirukkural Historical and Cultural Context

Thirukkural, a timeless Tamil classic, occupies a prominent position in the global literary heritage. This revered work, attributed to the philosopher Saint Thiruvalluvar, dates back approximately 2,000 years (Venkatesh, 2021). However, both the authorship and dating of this masterpiece have been subjects of debate, adding layers of complexity to its historical and cultural context (Gautam, 2021).

Within the rich tapestry of Indian literature, the Kural, commonly known as Thirukkural, stands as an illustrious contribution from Tamil culture. The term "Thirukkural" itself reflects its essence, with "Thiru" signifying "Sacred" and "Kural" denoting "Couplet". Crafted by Thiruvalluvar, affectionately known as Valluvar, this classical literary masterpiece is structured in a unique couplet form, each Kural consisting of seven words distributed across two lines. Remarkably, this structure makes it the most concise form of Tamil poetry (Manikandan, 2014). Thirukkural holds a pivotal place in history as one of the eighteen Didactic works of the Post-Sangam period, also referred to as the Tamil Veda and Tamil Marai. It encapsulates profound thoughts and addresses various virtues, all aimed at creating a world

free from evil and abundant with moral values, making it an ideal place to live (Mooneegadoo, 2020).

Thirukkural is known for its structured design. Each chapter comprises couplets, and each couplet imparts a specific message about various aspects of life. These couplets have been meticulously analyzed and explained by Tamil scholars, with each chapter focusing on a particular moral or virtue. For instance, the chapter titled "Love" features ten couplets, each offering distinct insights into the concept of love. This structured approach is a hallmark of Thirukkural's uniqueness, with every couplet conveying profound truths about life based on diverse moral principles (Kulandhaivel, 2020). Each couplet is composed of two lines, with seven "cirs" or words forming each Thirukkural. The first line consists of four cirs, while the second line comprises three cirs, with a cir representing either a single Tamil word or a combination of multiple Tamil words (Anita & Subalalitha, 2019).

Thirukkural, often referred to as the "Sacred Maxims," is an ancient Indian Tamil masterpiece attributed to Saint Thiruvalluvar, believed to have been composed around the 2nd century BC. It serves as a guide to life's virtues and ethics, emphasizing the importance of intelligence and humility as the greatest aspirations and the essence of human life (Gajjam, 2022). Beyond virtues, Thirukkural also delves into various aspects of life, including economic power, governance, education, and more, reflecting the materialistic culture of its time (Karunakaran, 2020). Notably, Thiruvalluvar's broad-minded and secular approach transcends any particular ideology, underscoring the work's universal appeal (Gautam, 2021).

Thirukkural, a literary masterpiece transcending boundaries, explores a wide spectrum of human life. Its enduring ethical and moral content is intricately woven throughout all three sections (Rajasegaram & Muniandy, 2022). This classical work not only enriches Indian heritage but also continues to provide relevant insights into ethics and morals, emphasizing its enduring significance for global peace and harmony (Gautam, 2021). Thirukkural adopts a pragmatic approach, addressing the four purusharthas, reflecting Tamil culture's core principles, advocating non-violence, and promoting a casteless society within its socio-economic structure (Jain, 2014). Its ethical foundations encompass the veneration of God and the concept of karma, presenting a universal code of morals resonating with traditional Vedic values (Chandran, 2016).

Thirukkural's historical and cultural context is a tapestry of complexity and richness, reflecting the enduring legacy of this timeless Tamil classic. As it continues to inspire and guide generations, Thirukkural remains a testament to the enduring power of literature and its profound impact on the human spirit.

The Impact of Thirukkural on Cognitive Development

Thirukkural, an ancient Tamil masterpiece, holds a significant place in the realm of cognitive development and ethical values. Its profound wisdom and ethical teachings are renowned for their transformative impact on cognitive enhancement. This essay delves into the multifaceted influence of Thirukkural, shedding light on its role in nurturing cognitive development and fostering ethical values.

Thirukkural's influence extends to cognitive development and ethical values. Prera's 2019 study revealed a transformation in the pedagogical approach to Thirukkural, significantly improving the Higher Order Thinking Skills (HOTS) of Form 2 students. Innovative teaching methods and Kural-based questioning techniques played a pivotal role in this shift. Ponniah et al (2019) further validated the effectiveness of teaching and learning Thirukkural within classroom settings, particularly in Tamil Primary Schools. High-order thinking skills

(HOTS), encompassing critical thinking, analysis, synthesis, creativity, and problem-solving, are vital for navigating complex challenges and contributing meaningfully to society (Arif et al., 2020).

Thirukkural, attributed to the poet Thiruvalluvar, renowned for its profound ethical and philosophical insights, serves as a valuable resource for enhancing cognitive abilities. This ancient Tamil masterpiece envisions education as a means to elevate individuals beyond instinctual behavior, emphasizing the importance of genuine knowledge, regardless of its source (Joshi, 2021). Thirukkural's verses frequently pose moral and ethical dilemmas, encouraging critical thinking, and ethical decision-making. It also contributes to the development of critical thinking skills, enhancing one's ability to scrutinize and make well-informed ethical judgments (Dhineshwaran, 2021).

Furthermore, Thirukkural imparts ethical and moral values, prompting individuals to reflect on their principles and their practical application in life. It elucidates the ethical foundations of politics and governance in ancient Tamil society, addressing statecraft, military excellence, and the qualities expected of leaders (Venkatesh, 2021). Thirukkural's nurturing of seven fundamental virtues, including Gratefulness, Intelligence, Humility, Truthfulness, Conscientiousness, Transparency, and Kindness, enriches cognitive faculties and aids their adaptability to various situations (Gajjam, 2022).

Thirukkural's extensive use of similes and metaphors augments cognitive abilities, making intricate concepts comprehensible (Ramalingam, 2020). Remarkably, despite its age, Thirukkural's wisdom remains profoundly relevant, attesting to its enduring impact on cognitive development (Subramaniam, 2019). This work, composed in pure Tamil, showcases the language's richness and complexity, stimulating cognitive engagement with its unique form (Rubavathanan, 2021).

Thirukkural's teachings encompass the entirety of human existence, providing timeless wisdom (Subramaniam, 2019). Its discussion of education, particularly in chapters 40-43, underscores the pivotal role of education in enabling individuals to attain meaning and prosperity in life (Joshi, 2021). Finally, the integration of moral values into Thirukkural instruction has been successful in instilling ethical principles among students, contributing to their cognitive growth. Thiruvalluvar, the revered author of Thirukkural, emphasized the pivotal role of virtue in nurturing human creativity, highlighting the inseparable connection between virtue and wealth (Mooneegadoo, 2020).

In conclusion, Thirukkural's influence extends beyond its literary significance. It plays a pivotal role in nurturing cognitive development and fostering ethical values. The timeless wisdom embedded in its verses continues to inspire critical thinking, ethical growth, and cognitive enhancement, making it an invaluable resource for individuals seeking intellectual and moral enrichment. Thirukkural's enduring legacy underscores the inseparable connection between virtue, wisdom, and cognitive prosperity.

Theoretical Framework

Theoretical frameworks play a pivotal role in guiding the design and implementation of educational interventions. In this context, the study aims to construct a theoretical framework for the development of high-order thinking skills through the study of Thirukkural, rooted in the Transfer of Learning theory. The Transfer of Learning theory investigates how learners can effectively apply their existing knowledge and skills in novel and diverse contexts, making it an essential framework for the enhancement of cognitive skills via the study of Thirukkural.

Theoretical investigations into transfer, as conducted by David Perkins and other scholars, explore how learners employ their knowledge and skills in fresh and varied situations. Encouraging students to transfer their knowledge from one context to another necessitates their involvement in higher-order thinking to discern connections and adapt their knowledge. According to Perkins and Salomon (1992), transfer of learning transpires when learning in one setting enhances (positive transfer) or hampers (negative transfer) a related performance in another context. Transfer encompasses both near transfer (to closely related contexts and performances) and far transfer (to notably distinct contexts and performances). Transfer is of paramount significance in education, which generally seeks to exert influence on contexts substantially different from the original learning context.

In the realm of transfer learning, knowledge derived from various source sample spaces and their associated probability distributions is transferred to a specific target sample space and its corresponding probability distribution (Cody & Beling, 2023). Transfer learning involves the reuse of knowledge from prior related tasks to streamline the process of acquiring new skills. Its objective is to harness previous learning and experience to expedite the mastery of novel, yet related, concepts, a feat that would be less attainable without the foundation of prior experience (Yang et al., 2012).

As outlined by Seel (2012), transfer pertains to the impact of earlier learning on subsequent learning endeavors. Some instances of transfer manifest as straightforward stimulus generalization, whereas in more intricate learning scenarios, transfer may hinge on the acquisition of principles or rules applicable to a variety of dissimilar circumstances. Students bridge the gap between theory and practice when they apply what they have learned in the classroom to real-world situations. They demonstrate their practical knowledge when they discern when and how to appropriately apply the content and skills they have acquired (Botma et al., 2013). Learning that offers authentic experiences closely connected to everyday life empowers learners to effectively structure their knowledge while stimulating sophisticated thinking, preparing them for life beyond the confines of the classroom (Sasson et al., 2021).

Within this framework, Thirukkural, a classical Tamil text consisting of 1,330 couplets, emerges as a potent cognitive catalyst. Thirukkural's profound wisdom and rich content offer learners abundant opportunities to engage in critical analysis, creative problem-solving, and intricate reasoning, thus facilitating the development of high-order thinking skills. The framework identifies essential cognitive skill domains pivotal for fostering high-order thinking skills through the study of Thirukkural:

- a. Thematic Exploration: Commence with an in-depth exploration of Thirukkural's core themes, encompassing ethics, morality, virtue, and governance. Encourage students to identify and comprehend central ideas and concepts within each section (Adhikaram) of Thirukkural.
- b. Close Reading and Analysis: Foster the practice of close reading of individual Kural couplets. Urge students to dissect each Kural, scrutinizing the language, metaphors, and literary devices employed by Thiruvalluvar (the author) to convey his messages.
- c. Comparative Analysis: Encourage students to undertake comparative analyses of Kural couplets within and across sections. Explore how different Kurals relate to or challenge each other, stimulating critical thinking regarding ethical dilemmas and nuanced perspectives.
- d. Critical Thinking: Thirukkural prompts readers to question, assess, and analyze verses to extract profound meanings and implications. Critical thinking skills involve identifying biases, recognizing logical fallacies, and exploring alternative viewpoints within the text.

e. Creative Thinking: Thirukkural's poetic and metaphorical language nurtures creative thinking as learners interpret and forge connections between verses and real-world situations. This fosters imaginative solutions and fresh interpretations.

f. Problem Solving: Thirukkural frequently presents moral and ethical quandaries, prompting learners to engage in ethical problem-solving and decision-making. This skill is readily transferable to real-life contexts.

g. Analytical Thinking: Students are encouraged to deconstruct intricate verses into constituent elements, discern patterns, and draw meaningful conclusions. Analytical thinking is honed through this systematic process.

h. Application and Transfer: This framework underscores the significance of not only acquiring high-order thinking skills but also their practical application and transfer to real-world scenarios. Learners are urged to employ the cognitive skills honed through the study of Thirukkural in their academic pursuits, personal lives, and broader societal contexts.

This theoretical framework effectively utilizes the Transfer of Learning theory to elucidate the development of high-order thinking skills through the study of Thirukkural. By actively involving learners in critical, creative, and analytical thinking within the framework of this classical text, educators can equip them with cognitive tools that transcend the confines of the classroom, nurturing intellectual growth and practical application across various dimensions of life.

Conceptual Framework

This conceptual framework outlines a comprehensive approach for cultivating high-order thinking skills through the study of Thirukkural. Thirukkural, a classical Tamil text comprising 1,330 couplets, offers a wealth of ethical and philosophical insights. Rooted in the Transfer of Learning theory, this framework provides a structured pathway to harness the full cognitive potential of Thirukkural, enabling learners to develop essential high-order thinking skills.

This conceptual framework identifies eight fundamental cognitive skill domains that are integral to the development of high-order thinking skills through the study of Thirukkural

1. Thematic Exploration

Involves a comprehensive exploration of Thirukkural's central themes, including ethics, morality, virtue, and governance.

Learning Objectives

- i. Identify and comprehend central ideas and concepts within each section (Adhikaram) of Thirukkural.
- ii. Establish connections between thematic elements across different sections.

2. Close Reading and Analysis

Encompasses the practice of meticulous examination and analysis of individual Kural couplets.

Learning Objectives

- i. Deconstruct each Kural to discern its language, metaphors, and literary devices employed by Thiruvalluvar.
- ii. Uncover deeper meanings, nuances, and rhetorical strategies within the verses.

3. Comparative Analysis

Encourages students to compare and contrast Kural couplets within and across sections.

Learning Objectives

- i. Investigate how different Kurals interrelate or challenge one another.
- ii. Foster critical thinking by exploring ethical dilemmas and diverse perspectives.

4. Critical Thinking

Promotes active questioning, evaluation, and critical analysis of Thirukkural verses.

Learning Objectives

- i. Identify biases, logical fallacies, and varying viewpoints within the text.
- ii. Construct well-reasoned arguments in response to ethical questions.

5. Creative Thinking

Encourages imaginative interpretation and application of Thirukkural's poetic and metaphorical language.

Learning Objectives

- i. Challenge students to connect verses creatively to real-world situations.
- ii. Stimulate the generation of innovative solutions and novel interpretations.

6. Problem Solving

Engages learners in ethical problem-solving and decision-making, prompted by Thirukkural.

Learning Objectives:

- i. Apply ethical principles derived from Thirukkural to analyze and resolve real-life moral dilemmas.

7. Analytical Thinking

Encourages the systematic breakdown of complex verses into constituent elements and the identification of patterns.

Learning Objectives

- i. Train students to analyze and synthesize information from Thirukkural systematically.
- ii. Foster the development of logical reasoning skills.

8. Application and Transfer

Emphasizes the practical application and transfer of high-order thinking skills to real-world scenarios.

Learning Objectives

- i. Challenge students to employ cognitive skills honed through Thirukkural in academic, personal, and societal contexts.
- ii. Encourage the adaptation of ethical principles derived from Thirukkural to contemporary challenges.

This conceptual framework, founded on the Transfer of Learning theory, presents a structured roadmap for the cultivation of high-order thinking skills through the study of Thirukkural. By immersing learners in thematic exploration, close reading, comparative analysis, critical and creative thinking, problem solving, analytical thinking, and practical application, educators empower them with cognitive tools that extend far beyond the confines of the classroom, enabling intellectual growth and meaningful engagement across the spectrum of life experiences. Figure 1 shows the conceptual framework for cultivating high-order thinking skills through Thirukkural

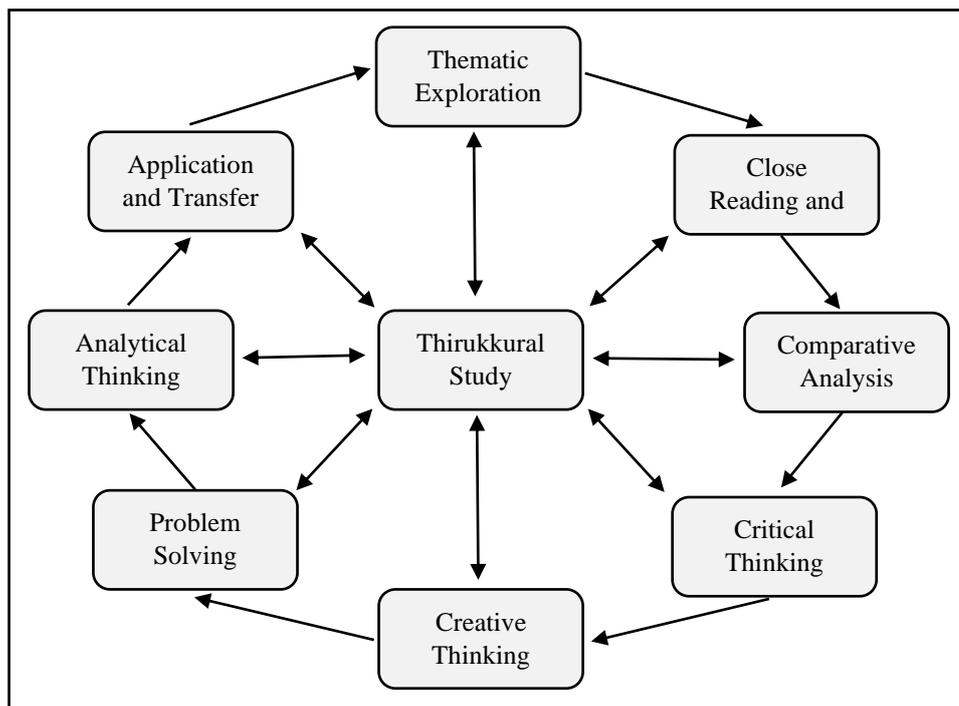


Figure 1. Conceptual framework for cultivating high-order thinking skills through Thirukkural

Significance of the Study

The significance of this research lies in its exploration of theoretical and conceptual frameworks for enhancing high-order thinking skills through the study of Thirukkural, a classical Tamil text of profound ethical and philosophical significance. The study's aim and objectives underscore its relevance and potential impact in several key areas.

This study has the potential to revolutionize educational practices by illuminating how Thirukkural, a timeless and culturally rich text, can be leveraged to enhance high-order thinking skills. Educators can benefit from a comprehensive understanding of the theoretical and practical foundations for integrating Thirukkural into curricula, thus enriching the learning experience for students. The identification of key cognitive skill domains within the context of Thirukkural provides a roadmap for the systematic cultivation of advanced cognitive abilities. This research offers a valuable resource for educators seeking to nurture critical thinking, creative thinking, problem-solving, analytical thinking, and ethical reasoning, which are essential skills in the 21st century.

Thirukkural is not only a literary masterpiece but also a repository of cultural and ethical values. By exploring its potential as an educational tool, this study contributes to the preservation and promotion of Tamil cultural heritage. It ensures that Thirukkural remains relevant and influential in contemporary educational settings. Thirukkural's focus on ethical and moral principles aligns with the broader societal need for individuals with strong ethical foundations. The research's emphasis on practical applications in education can help instill ethical values and moral reasoning in learners, fostering responsible citizenship and ethical decision-making.

This study bridges the gap between educational theory, cognitive psychology, and cultural studies. It offers interdisciplinary insights that have implications not only for educators but also for scholars interested in the transfer of learning theory, cognitive development, and the intersection of culture and education. Policymakers and curriculum

designers can draw upon the findings of this research to inform decisions related to educational reforms and the integration of culturally significant texts into curricula. It provides evidence-based recommendations for shaping educational policies that align with contemporary needs.

Conclusion

Thirukkural, a timeless masterpiece of classical Tamil literature, holds an indelible place in the realms of wisdom and ethical guidance. This essay has illuminated its multifaceted impact on cognitive development, emphasizing its role in nurturing high-order thinking skills. Thirukkural's verses serve as catalysts for critical thinking, ethical decision-making, and creative reasoning. They encourage introspection on moral and ethical principles, urging individuals to apply these principles in their daily lives. Moreover, Thirukkural's universal appeal transcends cultural and temporal boundaries, making it an invaluable resource for those seeking intellectual and moral enrichment.

Through the introduction of a theoretical framework rooted in the Transfer of Learning theory, this essay highlights the importance of transferring the knowledge and skills gleaned from Thirukkural to real-world contexts, fostering cognitive growth beyond the classroom. Furthermore, the presented conceptual framework offers educators a structured path to cultivate high-order thinking skills through the study of Thirukkural, encompassing thematic exploration, close reading, comparative analysis, critical and creative thinking, problem-solving, analytical thinking, and practical application.

In essence, Thirukkural remains a guiding light for ethical and intellectual enlightenment, providing profound insights into the human experience. By embracing its teachings and utilizing the frameworks outlined in this essay, individuals can embark on a journey of cognitive growth, moral development, and the application of high-order thinking skills, ultimately contributing to a more enlightened and harmonious society. Thirukkural's enduring wisdom continues to inspire and uplift generations, affirming the profound impact of literature on the human spirit.

Recommendations

Future research should focus on empirical studies to validate and test the proposed theoretical and conceptual frameworks for enhancing high-order thinking skills through the study of Thirukkural. Conducting experiments and surveys with students and educators can provide valuable insights into the effectiveness of these frameworks in real educational settings.

Long-term studies tracking the cognitive development and ethical decision-making of students exposed to Thirukkural-based education can offer deeper insights into the sustained impact of this approach. Longitudinal research can help assess how well high-order thinking skills cultivated through Thirukkural endure over time. Comparative analyses between traditional teaching methods and those integrating Thirukkural-based frameworks are essential to understand the specific benefits of using this classical text as an educational tool. Such studies can provide evidence of Thirukkural's unique contributions to cognitive development.

Research should explore how Thirukkural can be integrated into interdisciplinary curricula to enhance cognitive skills across various subjects. Investigating its applicability in fields like ethics, philosophy, literature, and history can provide a holistic view of its educational potential. Given Thirukkural's cultural significance, future research should

explore how its teachings can be adapted for diverse cultural and linguistic contexts. This includes translations and adaptations that retain its core values while making it accessible to a broader audience.

Investigate how modern technology, such as interactive apps or online platforms, can be employed to engage students with Thirukkural. Virtual learning environments and digital tools can enhance accessibility and interactivity. Develop training programs for educators to effectively implement Thirukkural-based teaching methods. Research can assess the impact of teacher training on their ability to facilitate high-order thinking skills development in students. Create assessment tools and rubrics tailored to evaluate the growth of high-order thinking skills resulting from Thirukkural-based education. This will enable educators to measure the effectiveness of their teaching methods accurately. Explore how Thirukkural's principles align with or differ from ethical and philosophical systems in other cultures. Comparative studies can shed light on universal ethical values and cultural nuances.

Investigate the role of community engagement and cultural organizations in promoting Thirukkural-based education. Partnerships between schools, cultural centers, and community groups can enhance the dissemination of this educational approach. In conclusion, future research endeavors should continue to explore the potential of Thirukkural as a catalyst for high-order thinking skills development. By conducting empirical studies, adapting its teachings for diverse contexts, and integrating modern educational approaches, researchers can further illuminate the transformative power of this timeless Tamil classic on cognitive growth and ethical values.

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About Authors

Karthees Ponniah is an Associate Professor from the Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris (UPSI), Tanjung Malim, Perak, Malaysia. Specializes in Literature and language learning. He has conducted three researches related to the practice of higher order thinking skills in the subject of Tamil language and literature. He also published impactful articles related to Tamil education and thinking skills. ORCID: <https://orcid.org/0000-0003-2955-0607>

Naina Mohamed Mohamed Safeek is lecturer from the Department of Educational Psychology, Faculty of Education, University of Colombo, Sri Lanka. PhD candidate at Faculty of Human Development, Universiti Pendidikan Sultan Idris (UPSI), Tanjung Malim, Perak, Malaysia. Specialized in Special Education and language learning. ORCID: <https://orcid.org/0000-0003-3494-4838>