

Ancient Indian Knowledge Systems and Modern Learning: An Analysis of Pañcha Kalā

Ghanashyam Sahu¹, Chandramani Bhue², Alokaxmi Behera³

¹Assistant Professor (Educational Studies), College of Teacher Education, Bhawanipatna,
gsahu.al@gmail.com

²Assistant Professor, (Odia) College of Teacher Education, Bhawanipatna

³DAV Autonomous College, Titilagarh

Abstract

The philosophy of Pañcha Kalā, rooted in Śaiva Siddhānta and elaborated in Thirumūlar's Tirumantiram, provides a profound framework for understanding consciousness. Traditionally explained as five stages of spiritual ascent-Pratiṣṭhā, Nivṛtti, Vidyā, Śānti, and Śāntyatīta-these stages also parallel contemporary insights in cognitive psychology, memory, metacognition, and spiritual intelligence. This paper interprets Pañcha Kalā through both traditional and modern lenses, demonstrating how it reflects processes of thought installation, forgetting, knowledge assimilation, subconscious influence, and transcendence. Using a conceptual and interpretive methodology, the study integrates philosophical analysis with educational psychology to propose a model of holistic education. The findings emphasize the significance of balancing acquisition and elimination of knowledge, strengthening metacognitive awareness, and nurturing spiritual intelligence. Educationally, Pañcha Kalā offers insights for curriculum design, teaching methods, and the roles of teachers and students, pointing toward a pedagogy that harmonizes intellectual, emotional, and spiritual growth. The paper concludes that Pañcha Kalā has enduring relevance in modern education, bridging ancient wisdom with contemporary learning sciences to foster resilience, reflective capacity, and lifelong learning.

Keywords: Pañcha Kalā, Cognitive psychology, Spiritual intelligence, Holistic education, Indian knowledge systems

Introduction

The philosophy of Pañcha Kalāi, preserved in the sacred architecture of Tamil temples through carvings of five presiding deities, represents a profound synthesis of spiritual and psychological thought in the Indian tradition. This doctrine, articulated in a symbolic “twilight language” (sandha bhāṣā)-similar to Charyāgītikā in Odia-is elaborated in Thirumūlar's Tirumantiram, a seminal text of the Śaiva Siddhānta school (Thirumūlar, trans. Natarajan, 1991). In verse 2374, titled The Ultimate State in the Jiva's Journey, Thirumūlar describes the successive stages of transcendence that guide the soul (jīva) beyond the five kalais and the thirty-six tattvas, culminating in the direct realization of the Ānma (soul) in union with Śiva. In this verse, the five Kalais are presented as domains under the guardianship of divine powers. Nivṛtti, ruled by Brahmā, is associated with the Earth principle, while Pratiṣṭhā encompasses the twenty-three principles from Water up to Prakṛti. Beyond these lies Vidyā, under the lordship of Viṣṇu, containing the seven Vidyā Tattvas. Above it stands Śānti, ruled by Maheśvara, which holds

the three Śiva Tattvas: Śuddha Vidyā, Īśvara, and Śuddha Śakti. At the highest level is Śāntyatīta, presided over by Sadāśiva, encompassing Śakti and Śivam. These supreme states are also expressed as Bindu and Nāda. Transcending them signifies the liberation of the soul from the thirty-six tattvas, allowing the subtle truth of the Ānma to shine forth in its purity (Ganapathy, 1993).

While the traditional reading situates the Pañcha Kalā within the metaphysical cosmology of Śaiva Siddhānta, modern interpretations expand its scope to encompass the inner workings of the human mind and consciousness. Raman and Pillai (2013) explain in *Siddhanta Deepika* that the five Kalais-Pratiṣṭhā, Nivṛtti, Vidyā, Śānti, and Śāntyatīta-can also be understood as stages in a cycle of mental and spiritual processes. Contemporary scholars and researchers suggest that these stages parallel cognitive functions: the installation of knowledge, the elimination of unnecessary thoughts, the assimilation of meaning, the influence of subconscious processes, and the transcendence into higher states of awareness (Mohan, 2024; Brogaard & Chudnoff, 2020). Thus, Pañcha Kalā embodies a dual significance: as a metaphysical pathway describing the soul's transcendence, and as a psychological framework for understanding human consciousness. This duality enhances its importance in discussions on spiritual intelligence, demonstrating how ancient Indian wisdom continues to inform both philosophical inquiry and modern educational thought.



Pancha Kala shown in the form of deities Temple Carving

Photo Courtesy: Athmanathar Temple Photo Collection by Chitra's Pilgrimage

Interpretation of Pancha Kala

In recent years, Pañcha Kalā has been revisited through new interpretive lenses that extend beyond its traditional metaphysical symbolism. Praveen Mohan (2024), drawing on his research into ancient symbols and temple architecture, interprets the five Kalās as markers of distinct psychological processes. Rather than viewing them exclusively as stages of spiritual ascent, he connects them to the operations of the human mind-describing how thoughts emerge, are discarded, assimilated as knowledge, stored in the subconscious, and ultimately transcended in states of higher awareness. This reading situates an ancient doctrine within the framework of modern cognitive science and educational psychology. Understanding this interpretive framework sets the stage for analyzing each Kalā individually, highlighting their pedagogical and psychological significance.



Pratiṣṭhā Kalā: The Installation of Thought



The first stage, Pratiṣṭhā Kalā, signifies the foundational process through which thoughts are installed or established in the human mind. In the traditional interpretation of Pañcha Kalā, it marks the beginning of a soul's engagement with knowledge and experience, corresponding to the grounding of consciousness in the material and linguistic world. Modern psychological perspectives enrich this interpretation by framing Pratiṣṭhā as the process of cognitive acquisition, where new ideas, words, and symbolic systems are embedded into the learner's mental framework. This process is

analogous to the installation of software on a digital device: the mind, like a system, requires external inputs-language, culture, and experience-to activate and expand its capabilities. Thoughts are not pre-programmed or innate; they must be acquired, shaped, and reinforced through interaction with the environment (Vygotsky, 1962; Tomasello, 2009). Infants, for example, begin by perceiving the world in a raw sensory and material form. Only later, with the development of linguistic ability, do they begin to categorize, symbolize, and conceptualize their surroundings (Kuhl, 2004). In this stage, language serves as the primary tool of cognition. According to socio-cultural theories, language is both a medium of communication and an instrument of thought construction, enabling the child to move from perceptual immediacy to abstract reasoning. Educationally, this implies that Pratiṣṭhā Kalā is not merely about memorizing words or facts, but about embedding the symbolic structures that allow meaning to take shape. The installation of thought also involves processes of attention, encoding, and initial memory formation, where the mind organizes raw sensory input into cognitive patterns (Craik & Lockhart, 1972). Further, cultural practices and social interaction play decisive roles in this installation process. Studies on joint attention, imitation, and guided participation illustrate how children acquire not only words but the cognitive frameworks of their communities (Rogoff, 2003). Each new concept installed becomes a building block in a dynamic mental system, opening pathways for creativity, problem solving, and reflective awareness. From a spiritual perspective, Pratiṣṭhā Kalā underscores the beginning of self-awareness. Just as a temple idol is consecrated through ritual to become a living embodiment of divinity, thoughts consecrate the human mind, allowing it to become a vessel for knowledge

and consciousness. In education, this stage suggests the importance of mindful initiation-ensuring that what is installed in the learner's mind is meaningful, ethically grounded, and conducive to holistic development. From this installation of thought, the mind must also learn the art of selective forgetting, which leads to the significance of Nivṛtti Kalā.

Nivṛtti Kalā: The Process of Release and Forgetting



Nivṛtti Kāla

The second stage, Nivṛtti Kalā, embodies the principle of withdrawal, release, and forgetting. Within the traditional framework of Pañcha Kalā, Nivṛtti represents a turning away from attachment to accumulated experiences, knowledge, and material entanglements. It symbolizes purification-clearing the field of consciousness so that higher stages of awareness can unfold. In psychological terms, this stage resonates with the process of forgetting or discarding unnecessary mental content, which is not a defect but a crucial cognitive and emotional necessity (Bjork & Bjork, 1996). Forgetting functions as the mind's natural housekeeping mechanism, ensuring that irrelevant, intrusive, or outdated information does not overwhelm working memory or interfere with new learning (Anderson & Hanslmayr, 2014). Just as the body eliminates waste to maintain health, the mind discards redundant traces to preserve clarity and flexibility. Neuroscientific studies suggest that forgetting is an adaptive process, allowing the brain to remain efficient by pruning synaptic connections and preventing cognitive overload (Richards & Frankland, 2017). However, Nivṛtti is not synonymous with total erasure. Instead, it involves selective regulation, where the mind retains meaningful experiences while gradually weakening the accessibility of what no longer serves present purposes (Levy & Anderson, 2012). This dynamic balance is essential: excessive retention leads to clutter and cognitive chaos, while excessive forgetting can undermine knowledge acquisition and skill development (Eysenck & Keane, 2015). Once unnecessary content is released, the learner is prepared for Vidyā Kalā, where retained knowledge is transformed into meaningful wisdom.

Vidyā Kalā: Assimilation and Transformation of Knowledge



Vidyā Kāla

The third stage, Vidyā Kalā, marks the transformative process through which knowledge moves beyond simple accumulation and enters the realm of deep assimilation. In the Pañcha Kalā tradition, Vidyā signifies illumination-the internalization of wisdom that allows the soul to transcend surface understanding. Unlike the first stage, which installs thought, and the second, which clears unneeded content, Vidyā is about restructuring what remains into coherent, meaningful insights. At this stage, information is not passively stored but actively metabolized, much like the body digests nutrients and converts them into energy (Chi, 2009). Through processes of reflection, integration, and contextualization, the mind transforms raw input into knowledge that can be applied across situations (Bransford et al., 2000). Educational psychology describes this shift as the move

from rote memorization to higher-order thinking, where learners build conceptual frameworks, mental models, and schemas that enable transfer of learning (Sweller et al., 2011). The significance of Vidyā Kalā lies in its emphasis on meaning-making. Learners construct relationships between new and prior knowledge, weaving them into cognitive structures that allow both retention and application. This aligns with constructivist theories of learning, which view understanding as an active process of assembling ideas rather than a passive reception of facts (Piaget, 1971; Vygotsky, 1978). Deep learning emerges when learners critically analyze, synthesize, and evaluate information, moving from “knowing that” to “knowing how” and ultimately to “knowing why.” Culturally, Vidyā has always been associated with light, clarity, and the dispelling of ignorance. In Indian thought, true vidyā is not mere book knowledge but transformative wisdom that aligns the individual with ṛta (cosmic order). This understanding bridges the material and spiritual domains, emphasizing that knowledge must be lived, embodied, and ethically grounded. The deep assimilation of Vidyā naturally leads to the subconscious reservoir of Śānti Kalā, where impressions shape awareness beyond immediate cognition.

Śānti Kalā: The Subconscious Dimension of Mind



The fourth stage, Śānti Kalā, represents the quiet yet profound domain of the subconscious—a reservoir of impressions, memories, and beliefs that remain beyond the reach of immediate awareness but continuously shape conscious life. In the Pañcha Kalā tradition, Śānti signifies stillness, depth, and subtle awareness. It is the realm where accumulated experiences settle, forming the undercurrents of thought, perception, and behavior. Psychological research confirms this dimension of human cognition. The subconscious is home to implicit memories and automatic processes that influence decisions, emotions, and

judgments without deliberate awareness (Kihlstrom, 1987). Evidence of its operation emerges in delayed recall, dream activity, slips of the tongue, or memories retrieved under hypnosis (Oakley & Halligan, 2013). Far from being passive, subconscious activity constitutes the majority of mental functioning, regulating everything from routine behaviors to creative insights. It exerts a decisive, though often unnoticed, influence on conscious life (Bargh & Morsella, 2008). Philosophically and spiritually, Śānti is a state of inner stillness that allows the subtle vibrations of consciousness to be felt. Indian traditions describe the subconscious storehouse as the saṃskāras—impressions carried across experiences and lifetimes. These latent impressions govern tendencies and predispositions until they are consciously addressed. Meditation and contemplative practices serve as tools for accessing this hidden realm, calming its turbulence, and transforming subconscious imprints into clarity and peace. Thus, Śānti Kalā integrates psychology and spirituality by acknowledging that the mind is more than its conscious surface. Beneath lies a powerful field where impressions reside, guiding choices, creativity, and even spiritual awakening. In education, nurturing this level requires practices that go beyond intellectual growth to foster reflection, emotional awareness, and moral grounding, ensuring that the subconscious becomes a source of stability and harmony rather

than conflict. When these subconscious impressions are harmonized, the path opens toward Śāntyatīta Kalā, the ultimate transcendence into super consciousness.

Śāntyatīta Kalā: Transcendence and Super Consciousness



Śāntyatīta Kāla

The fifth and highest stage, Śāntyatīta Kalā, transcends the boundaries of ordinary cognition, pointing toward a state of super consciousness where the limitations of thought, memory, and perception are surpassed. The term Śāntyatīta literally means “beyond peace” or “beyond stillness,” signifying an awareness that is not confined to the subconscious calm of Śānti Kalā but rises above it into a domain of expanded consciousness and ultimate unity. In the Pañcha Kalā tradition, this stage is regarded as the gateway to liberation, where the self (Ānma) stands in direct communion with Śiva, free from the conditioning of the thirty-six tattvas. Psychologically, Śāntyatīta Kalā parallels higher-order functions of the human mind, such as metacognition and executive control. These faculties enable individuals to monitor, regulate, and adapt their thinking, emotions, and behavior in flexible and goal-directed ways (Flavell, 1979; Miyake et al., 2000). Advanced processes such as attentional regulation, impulse control, problem-solving, and cognitive flexibility emerge most strongly at this level (Diamond, 2013). Unlike the subconscious operations of Śānti Kalā, Śāntyatīta reflects the mind’s capacity for self-awareness, deliberate reflection, and adaptive transformation—hallmarks of mature cognition and psychological well-being. Spiritually, Śāntyatīta Kalā is regarded as the culmination of the human journey. It is not simply about heightened cognition but about transcending the ego-bound structures of mind altogether. Indian philosophy describes this state as Sat–Cit–Ānanda-being, consciousness, and bliss—where the individual self merges with universal consciousness (Radhakrishnan, 1953). Unlike intellectual knowledge, which remains bounded by duality, super consciousness reveals unity, harmony, and freedom. Modern studies on wisdom, self-transcendence, and developmental psychology suggest similar states of integration where identity expands beyond personal boundaries into compassion, purpose, and interconnectedness (Roebbers, 2017).

These five stages collectively offer profound implications for modern education, forming the basis for holistic curriculum and pedagogy.

Educational Implications of Pañcha Kalā in Modern Education

The reinterpretation of Pañcha Kalā offers more than a philosophical framework—it provides actionable insights for education. Its integration can reshape curriculum, teaching methods, and roles of teachers and students.

1. Aims of Education

- **Holistic Development of Learners**

Education grounded in the philosophy of Pañcha Kalā emphasizes the unity of cognitive, affective, and spiritual growth. Learners are not viewed merely as repositories of information but as whole beings whose intellectual skills, emotional balance, and spiritual consciousness

must be nurtured in harmony. Such a holistic vision aligns with Indian traditions of integral education and global perspectives that call for educating the “whole child.” Studies in holistic education argue that integrating academic knowledge with emotional and spiritual learning creates individuals who are competent, compassionate, and socially responsible (Miller, 2007; National Education Policy [NEP], 2020). By balancing rational knowledge with emotional intelligence and ethical values, education can create learners who are prepared for both personal fulfillment and collective well-being.

- **Balance between Acquisition and Elimination of Knowledge**

An essential implication of Pañcha Kalā is the balance between retention and forgetting. Just as the mind installs new thoughts and experiences, it must also discard irrelevant or harmful ones. Education should therefore cultivate both the acquisition of knowledge and the wisdom to eliminate cognitive overload, misinformation, and negative thoughts. Psychological studies highlight that active forgetting is not a weakness but an adaptive mechanism for maintaining mental clarity and reducing anxiety (Anderson & Hanslmayr, 2014; Levy & Anderson, 2012). Within the Indian knowledge tradition, this balance resonates with yogic and meditative practices that emphasize letting go of unhelpful impressions (Chauhan & Bansal, (n.d). Such balance allows learners to focus on concepts that enrich personal growth while avoiding mental clutter and cognitive exhaustion.

- **Strengthening Metacognitive and Executive Functions**

Pañcha Kalā highlights the significance of higher-order thinking processes, closely linked with modern theories of metacognition and executive functions. Education should empower learners not only to acquire content but also to monitor, regulate, and reflect upon their learning processes. Research demonstrates that metacognitive awareness fosters adaptive learning, resilience, and problem-solving capacity in complex tasks (Flavell, 1979; Roebers, 2017). Executive functions such as working memory, inhibitory control, and cognitive flexibility are crucial for self-regulation and academic achievement (Diamond, 2013). Indian educational thinkers like Sri Aurobindo also emphasized reflective consciousness as central to true education (Aurobindo, 1956). This objective shifts education away from rote memorization towards reflective, adaptive learning.

- **Development of Lifelong Learning Competencies**

The doctrine of Pañcha Kalā resonates with the idea of learning as a lifelong process, where knowledge is continuously acquired, internalized, and renewed. Education should foster curiosity, adaptability, and critical thinking that extend beyond formal schooling. UNESCO (2015) emphasizes lifelong learning as the foundation for sustainable development, while research shows that learners who transform raw information into structured knowledge are better prepared for changing global contexts (Bransford et al., 2000; Sweller et al., 2011). Within Indian philosophy, the Upanishadic idea of vidya as an ever-expanding pursuit of truth mirrors this objective (Radhakrishnan, 1953). Thus, education aligned with Pañcha Kalā prepares learners not just for examinations but for life-long adaptability, innovation, and growth.

- **Nurturing Spiritual Intelligence**

The ultimate aim of Pañcha Kalā in education lies in fostering spiritual intelligence, guiding learners towards higher states of awareness, harmony, and self-realization. Beyond cognitive skills, education must provide opportunities for contemplation, ethical reflection, and transcendence. Research shows that spiritual intelligence contributes to inner peace, resilience, and purpose-driven living (Emmons, 2000; King & DeCicco, 2009). Within Indian tradition, spiritual realization as Sat–Cit–Ānanda (existence–consciousness–bliss) is considered the highest knowledge (Radhakrishnan, 1953). Recent studies in education also confirm that integrating mindfulness and contemplative practices enhances attention, empathy, and well-being (Roeser et al., 2012). Such nurturing transcends material success, enabling learners to live in balance with themselves, others, and the environment.

2. Curriculum

- **Integrated Framework Across Disciplines:** A Pañcha Kalā–inspired curriculum should transcend disciplinary boundaries to present knowledge as interconnected rather than fragmented. Integrating sciences, humanities, philosophy, and arts allows learners to perceive reality as a whole and nurtures higher-order thinking. This interdisciplinary perspective echoes both the Indian tradition of vidyā as comprehensive wisdom and contemporary calls for integrative learning frameworks (Bransford et al., 2000; NEP, 2020). Such a curriculum can foster deeper understanding, creativity, and problem-solving, preparing students to address complex social and global challenges through holistic knowledge systems.
- **Mindfulness, Ethics, and Values Education:** Embedding mindfulness, ethics, and values into the curriculum ensures that knowledge is not merely academic but also cultivates inner harmony and social responsibility. Pañcha Kalā emphasizes not just intellectual acquisition but also spiritual awareness, aligning with modern evidence that values-based and contemplative curricula enhance empathy, emotional regulation, and resilience (Roeser et al., 2012). Indian education systems, historically grounded in śikṣā and dharma, envisioned moral and spiritual training as inseparable from intellectual pursuits (Aurobindo, 1956). Integrating these dimensions into modern curricula can create balanced learners who pursue knowledge with responsibility and compassion.
- **Balanced Cognitive Load:** Another implication of Pañcha Kalā is the recognition that learners must balance acquisition (Pratiṣṭhā) with elimination (Nivṛtti) of knowledge. A curriculum that overloads learners with facts risks impairing both comprehension and mental health. Applying principles from cognitive load theory, educators should structure learning materials to optimize memory retention, allow time for reflection, and support forgetting of redundant information (Sweller et al., 2011). This balance helps prevent cognitive chaos while fostering meaningful and durable learning. Such design resonates with ancient Indian pedagogy that valued pauses, contemplation, and silence as integral to learning.

3. Method of Teaching

- **Experiential and Reflective Activities:** Experiential learning lies at the core of Vidyā and Śānti stages of Pañcha Kalā, where knowledge is absorbed and reflected upon. Learning activities should encourage students to engage directly with real-life contexts, problem-solving situations, and community interactions, followed by opportunities for introspection and reflection. Research affirms that experiential and reflective practices deepen conceptual understanding and nurture transferable skills (Kolb, 1984; Chi, 2009). Incorporating meditation, journaling, storytelling, and dialogue into the curriculum can further help learners internalize concepts, connect them with lived experiences, and progress towards higher states of awareness.
- **Dialogic and Reflective Learning (Socratic/Vedic Methods):** Teaching in line with Pañcha Kalā should emphasize dialogue, reflection, and inquiry rather than passive reception of knowledge. The Upaniṣadic model of śravaṇa (listening), manana (reflection), and nididhyāsana (contemplation) parallels the Socratic method, where questioning and critical dialogue foster deeper understanding (Radhakrishnan, 1953). Research on dialogic pedagogy confirms that reflective questioning enhances critical thinking, self-awareness, and learner engagement (Alexander, 2018). This approach resonates with Pratiṣṭhā and Vidyā stages, where knowledge is installed and internalized through active dialogue and self-exploration.
- **Constructivist and Collaborative Pedagogy:** Constructivist teaching methods align strongly with Pañcha Kalā, where knowledge emerges through learner participation and meaning-making rather than rote memorization. Learners co-construct knowledge through interactions with peers, teachers, and their environment (Vygotsky, 1962). Collaborative learning fosters shared reflection, collective problem-solving, and negotiation of meaning, all of which enhance comprehension and social responsibility (Tomasello, 2009). This mirrors the Vidyā stage, where assimilation of knowledge transforms individual understanding into collective wisdom.
- **Project/Problem-Based Learning:** Pañcha Kalā encourages learners to engage in real-life contexts where knowledge is tested, applied, and restructured. Project- and problem-based learning situates students in authentic tasks that demand inquiry, critical reasoning, and creativity (Barrows, 1996). This methodology fosters higher-order thinking, deepens conceptual understanding, and enhances motivation (Hmelo-Silver, 2004). Such approaches resonate with the Vidyā and Śānti stages, enabling learners to integrate theoretical knowledge with practical application, leading to lasting learning outcomes and adaptive skills.
- **Mindfulness and Contemplative Practices:** Mindfulness and contemplative approaches correspond to Nivṛtti and Śāntyatīta, where learners transcend cognitive overload and enter higher states of awareness. Integrating meditation, breathing exercises, and mindful pauses into classrooms enhances attention, self-regulation, and emotional stability (Roeser et al., 2012). Studies confirm that contemplative pedagogy improves resilience, empathy, and stress management among learners and teachers (Jennings et al., 2017). Such practices also reflect Indian traditions of integrating

silence, self-study (svādhyāya), and meditation into the learning process as pathways to wisdom.

- **Use of Art, Symbolism, and Metaphors:** Symbolism and metaphors, central to Pañcha Kalā's twilight language (sandha bhāṣā), provide powerful pedagogical tools for conveying abstract concepts in accessible ways. Artistic expressions-through stories, poetry, drama, or temple carvings-facilitate experiential and emotional engagement with knowledge. Educational research highlights that metaphors foster conceptual understanding and creativity by linking new knowledge with familiar experiences (Lakoff & Johnson, 1980). Such approaches connect learners to both cultural heritage and personal meaning, making education not only informative but also transformative.

4. Role of Teacher

In the Pañcha Kalā framework, the teacher is more than a transmitter of information-they act as a facilitator, mentor, and guide toward holistic development. The teacher must balance intellectual rigor with emotional sensitivity and spiritual guidance, ensuring that learners acquire knowledge selectively and reflectively (Miller, 2007). Teachers need to encourage both memory consolidation and forgetting of irrelevant or harmful content, enabling students to maintain mental clarity (Anderson & Hanslmayr, 2014). The role also involves modeling ethical behavior, mindfulness, and reflective practice, aligning with Indian traditions where the teacher (guru) embodies wisdom (Aurobindo, 1956). International evidence also highlights that teacher modeling of metacognitive and mindfulness practices significantly enhances student engagement and self-regulation (Jennings et al., 2017). Thus, teachers serve as catalysts for transforming education into a journey of self-realization and wisdom.

5. Role of Student

Learners in the Pañcha Kalā-based education system are envisioned as active participants, co-constructors of knowledge, and seekers of wisdom. They must not only acquire knowledge but also cultivate the ability to regulate thoughts, engage in reflection, and pursue lifelong learning. The student's role involves balancing acquisition and elimination, critically engaging with concepts, and internalizing only what promotes growth and well-being (Levy & Anderson, 2012). In line with Vygotsky's (1962) view of active social participation, students are expected to interact, question, and co-create knowledge rather than passively absorb information. Indian traditions further stress the learner's role in self-discipline (svādhyāya) and contemplation as pathways to higher awareness (Radhakrishnan, 1953). Thus, students evolve as reflective learners who transcend academic achievement to cultivate spiritual intelligence, purpose, and harmony.

Conclusion

The reinterpretation of Pañcha Kalā provides an innovative lens for modern education, bridging ancient Indian philosophical insights with contemporary learning sciences. Each stage-from knowledge acquisition to transcendence-offers pedagogical strategies that address cognitive, emotional, and spiritual dimensions of learners. In an age dominated by fragmented information and performance-driven curricula, Pañcha Kalā calls for a holistic educational

vision that nurtures wisdom, resilience, and enlightenment. Its integration into modern pedagogy not only strengthens academic achievement but also prepares learners for the deeper pursuit of human flourishing. Further exploration is required to reinterpret the philosophy through the broader frameworks of human development and organizational development, supported by evidence from mythological and epic traditions.

References

1. Alexander, R. (2018). Developing dialogic teaching: Genesis, process, trial. *Research Papers in Education*, 33(5), 561–598. <https://doi.org/10.1080/02671522.2018.1481140>
2. Anderson, M. C., & Hanslmayr, S. (2014). Neural mechanisms of motivated forgetting. *Trends in Cognitive Sciences*, 18(6), 279–292. <https://doi.org/10.1016/j.tics.2014.03.002>
3. Aurobindo, S. (1956). *The foundations of Indian culture*. Pondicherry: Sri Aurobindo Ashram Press.
4. Bargh, J. A., & Morsella, E. (2008). The unconscious mind. *Perspectives on Psychological Science*, 3(1), 73–79. <https://doi.org/10.1111/j.1745-6916.2008.00064.x>
5. Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. *New Directions for Teaching and Learning*, 1996(68), 3–12. <https://doi.org/10.1002/tl.37219966804>
6. Bjork EL, Bjork RA. Continuing Influences of To-Be-Forgotten Information. *Conscious Cogn.* 1996 Mar;5(1/2):176-96. <https://doi.org/10.1006/ccog.1996.0011>
7. Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school*. National Academy Press. <https://doi.org/10.17226/9853>
8. Brogaard, B., & Chudnoff, E. (2020). Consciousness and knowledge. In U. Kriegel (Ed.), *The Oxford handbook of the philosophy of consciousness* (pp. 631–656). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198749677.013.27>
9. Chauhan, D., & Bansal, S. (n.d). Bridging traditions and trends: Exploring Indian knowledge systems and yoga in the modern era. *Sirjana Journal*, 54(7), 20–35.
10. Chi, M. T. H. (2009). Active-constructive-interactive: A conceptual framework for differentiating learning activities. *Topics in Cognitive Science*, 1(1), 73–105. <https://doi.org/10.1111/j.1756-8765.2008.01005.x>
11. Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11(6), 671–684. [https://doi.org/10.1016/S0022-5371\(72\)80001-X](https://doi.org/10.1016/S0022-5371(72)80001-X)
12. Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64(1), 135–168. <https://doi.org/10.1146/annurev-psych-113011-143750>
13. Emmons, R. A. (2000). Is Spirituality an Intelligence? Motivation, Cognition, and the Psychology of Ultimate Concern. *International Journal for the Psychology of Religion*, 10, 3–26. https://doi.org/10.1207/S15327582IJPR1001_2
14. Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, 34(10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>

15. Ganapathy, T. N. (1993). The philosophy of the Tamil Siddhas. Indian Council of Philosophical Research
16. Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2017). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly*, 32(3), 282–298. <https://doi.org/10.1037/spq0000190>
17. Kihlstrom, J. F. (1987). The cognitive unconscious. *Science*, 237(4821), 1445–1452. <https://doi.org/10.1126/science.3629249>
18. King, D. B., & DeCicco, T. L. (2009). A viable model and self-report measure of spiritual intelligence. *International Journal of Transpersonal Studies*, 28(1), 68–85. <https://doi.org/10.24972/ijts.2009.28.1.68>
19. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
20. Kuhl, P. K. (2004). Early language acquisition: Cracking the speech code. *Nature Reviews Neuroscience*, 5(11), 831–843. <https://doi.org/10.1038/nrn1533>
21. Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. University of Chicago Press.
22. Levy, B. J., & Anderson, M. C. (2012). Purging of memories from conscious awareness tracked in the human brain. *Journal of Neuroscience*, 32(47), 16785–16794. <https://doi.org/10.1523/JNEUROSCI.2640-12.2012>
23. Miller, R. (2007). *The holistic curriculum*. University of Toronto Press.
24. Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., Howerter, A., & Wager, T. D. (2000). The unity and diversity of executive functions and their contributions to complex “frontal lobe” tasks: A latent variable analysis. *Cognitive Psychology*, 41(1), 49–100. <https://doi.org/10.1006/cogp.1999.0734>
25. Mohan, P. (2024, December 27). Pancha Kala: The five secrets of your mind [Video]. YouTube. <https://www.youtube.com/watch?v=jaQH2KegL0s>
26. National Education Policy. (2020). *National Education Policy 2020*. Ministry of Education, Government of India.
27. Oakley, D. A., & Halligan, P. W. (2013). Hypnotic suggestion: Opportunities for cognitive neuroscience. *Nature Reviews Neuroscience*, 14(8), 565–576. <https://doi.org/10.1038/nrn3538>
28. Piaget, J. (1971). *Biology and knowledge*. University of Chicago Press.
29. Radhakrishnan, S. (1953). *The principal Upanishads*. HarperCollins.
30. Raman, V. V., & Pillai, J. M. N. (2013). *Siddhanta Deepika: The light of truth*, 8 Facsimile Publisher.
31. Richards, B. A., & Frankland, P. W. (2017). The persistence and transience of memory. *Neuron*, 94(6), 1071–1084. <https://doi.org/10.1016/j.neuron.2017.04.037>
32. Roebers, C. M. (2017). Executive function and metacognition: Towards a unifying framework of cognitive self-regulation. *Developmental Review*, 45, 31–51. <https://doi.org/10.1016/j.dr.2017.04.001>
33. Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers’ professional development: An emerging area of research and practice. *Child Development Perspectives*, 6(2), 167–173. <https://doi.org/10.1111/j.1750-8606.2012.00238.x>

34. Rogoff, B. (2003). The cultural nature of human development. Oxford University Press.
35. Sweller, J., Ayres, P., & Kalyuga, S. (2011). Cognitive load theory. Springer.
<https://doi.org/10.1007/978-1-4419-8126-4>
36. Thirumūlar. (1991). Tirumantiram: A Tamil scriptural classic (B. Natarajan, Trans.). Madras: Sri Ramakrishna Math.
37. Tomasello, M. (2009). The cultural origins of human cognition. Harvard University Press.
38. UNESCO. (2015). Rethinking education: Towards a global common good? UNESCO Publishing.
39. Vygotsky, L. S. (1962). Thought and language. MIT Press.
40. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.