



Multisensory Learning in Ancient Indian Education: Relevance for NIPUN Bharat Mission's Foundational Literacy and Numeracy (FLN) Goal

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Abstract:

Multisensory learning played an important role in ancient Indian education, emphasizing holistic development through auditory, visual and kinesthetic methods. Multisensory learning approach is a teaching method that uses more than one sense commonly known as VAKT (Visual, Auditory, kinesthetic and tactile) that enhances the learning process of the students. These multisensory techniques not only improve the learning experience in ancient India but they also align with modern educational theories, demonstrating their lasting relevance. This paper is an attempt to examine the significance of multisensory learning in the ancient Indian educational system that combined auditory, visual and kinesthetic learning methods and suggest the relevance of these methods in achieving the foundational literacy and numeracy (FLN) goals of the NIPUN Bharat Mission. The paper concludes that incorporating multisensory method such as oral storytelling, visual aids and hands on activities into the NIPUN Bharat framework can improve foundational literacy and numeracy skill among children.

Keywords: *Multisensory learning, Ancient Indian Education, NIPUN Bharat Mission, Foundational learning, Visual learning, Auditory Learning, Kinesthetic learning*

1. Introduction

In the era of digitalization, technology has changed education in numerous ways making it easier and more flexible. Students can now learn online, use digital tools and study at their own pace. Education in ancient India was quite different as it focuses in the Gurukul system, where students learned through direct interaction with their guru (teacher) in a holistic and immersive environment. Consequently, the Ancient Indian Education system deeply rooted in Gurukul system because education was mostly imparted in the traditional Gurukulas where learner (Shishya) had to leave the house at the age of 8 and undergo the Upanayan ceremony and for entire period of learning student had to live with teacher (Guru) in an Ashram (**Pradhan, 2019**). In Gurukul mainly two methods of teaching were being practice. The first method was Muakhik (oral) where student memorized scriptures, mantras (Vedic hymns) and Richayas (Verses of Rig veda) through continues recitation and repetition ensuring retention and deep understanding. The second teaching method has based on chintan-manan (thinking or reflection). Through this method, an attempt was made to preserve the vedic hymns and verses. The present education system, teachers continue to guide student in research, apply, evaluate and create, this process was also present during the gurukul period (**Chaube, 2008**).

2. Multisensory Learning Approach

Multisensory learning approach is a teaching method that uses more than one sense commonly known as VAKT (Visual, Auditory, kinesthetic and tactile) that enhances the learning process of the students

(Syahputri, 2019). Learning with more senses allows the children to remember things for longer period because more parts of the brain are engaged (Harvey, 2024). Multisensory learning can be traced back to 1912, when educators used various multisensory methods to make learning more engaging and effective (Montessori, 1912). It also promotes active participation keeping students motivated and improving language development. Overall, this approach fosters a deeper understanding of concepts while making learning more interesting and enjoyable. Hence, students understand a new concept best when they learn it through seeing, hearing, speaking and doing.

In the Gurukul system of education, education was not limited to rote memorization but focus was on experimental learning integrating, multi senses to enhance cognitive and spiritual development through oral recitation, visual aids and hands on learning. Some of the main multisensory learning approaches used in the ancient Indian education system are:

1. **Auditory Learning:** Due to lack of printing materials, in Gurukul System of Education, scripts were in the form of handwritten and knowledge was transmitted in oral that emphasized memorization of scriptures such as Vedas, Upanishad and Puranas through rhythmic chanting (Srivastava, 2021). The learners listened (Shravan) to the teacher with full attention and recitation (abhyasa) to the hymns, philosophical texts and moral stories uttered by the guru that helped develop strong linguistic and memory (Sharma, 2018).
2. **Visual Learning:** use of symbolic representation, pictorial depictions in temple architecture, palm-leaf manuscripts and observation technique added cognitive development of the learners.
3. **Kinesthetic Learning:** Kinesthetic learning also known as hands on learning emphasized through activities such as yajnas (rituals), sculpting, agriculture, cattle rearing, weaving, architecture etc. and hospital were also attached to these centers where learner received practical education of diagnosis and cure of diseases (Lal and Sinha, 2008). This kinesthetic learning approach encourages deep understanding to the learners.

3. Modern Educational theories on Multisensory Learning Approach

Modern education system focuses on developing students', skills, knowledge and character by utilizing technology, innovative teaching methodologies and learner-centered strategies. Modern education differs from ancient education, as it is more flexible, interactive and student-centered allowing learners to take an active role in their learning process (Nasar, 2024). Modern educational theories aim to nurture well-rounded individuals characterized by their adaptive, inclusive and learner-centered methodologies emphasize multisensory learning.

- **Howard Gardner's Multiple Intelligences Theory:** Gardner's theory proposes that intelligence is not single ability but consist of multiple intelligence, including linguistic intelligence, Logical-mathematical, spatial musical, bodily kinesthetic, intra-personal and inter-personal. Multisensory learning supports Gardner multiple intelligence learning by engaging students in different modes of learning. For example, auditory learners benefit from oral storytelling, visual learners from pictorial representations and kinesthetic learners from hands-on activities. By recognizing and using different types of intelligence, teacher can make learning more inclusive and effective (Mangal, 2016).
- **Mari Montessori's Approach:** Montessori's educational philosophy focuses on child-centered learning through sensory-based activities. Mari's method uses hands-on materials as sandpaper letters, counting beads and puzzle maps allowing children to explore concepts through touch, sight and movement. This approach promotes self-directed learning, concentrating and problem-solving abilities that are consistent with multisensory learning principles. By engaging multiple senses child gain a deeper understanding making learning more meaningful and long-lasting (Montessori, 1912).
- **Vygotsky's Social-Culture Theory:** Lev Vygotsky's theory emphasizes the importance of social interaction and scaffolding in learning. He proposed that children learn best when they interact with knowledgeable adults such as teachers, peers or parents who guide them through the learning process. This scaffolding approach allows learners to gradually develop higher cognitive skills. Multisensory learning when combined with social interaction improves comprehension and retention because

children participate in hand on activities while receiving guided support. This method is particularly beneficial in foundational literacy and numeracy development where collaboration-learning environment promote cognitive growth (Parsons et al., 2001).

4. NIPUN Bharat Mission

The National Initiative for Proficiency in reading with Understanding and Numeracy (NIPUN Bharat Mission) was launched on 5th July 2021 by the Indian government as a part of National Educational Policy (NEP) 2020. It aims to ensure foundational literacy and numeracy (FLN) by Grade III for all the children by 2026-27 (NCERT, 2023). The mission emphasis activity- based and joyful learning to develop reading, writing and basic mathematical skills among young learners. Incorporating multisensory method in NIPUN Bharat Mission can create an inclusive, engaging and effective environment allowing children to develop strong foundational literacy and numeracy skills. Therefore, in this context the present paper aims to examine the role of multisensory learning approaches in ancient Indian education system and suggest the relevance of multisensory learning approaches in achieving foundational literacy and numeracy goals of NIPUN Bharat.

4.1 Methodology

Qualitative approach integrating historical method was employed for the present paper. Data were collected through secondary sources, such as books and articles.

4.2 Findings and Discussions

4.2.1 Role of Multisensory Learning Approaches in Ancient Indian Education System

Ancient Indian education relied on oral recitation, which improved phonological awareness, language acquisition and improved memory retention through repetitive chanting. Symbols and pictographs in temple architecture were used for learning through visual stimuli. Activities such as yoga, dance and hand gestures (mudras) were also important in helping movement and sensory engagement. According to Mahatma Gandhi, “By education I mean an all round drawing out of the best in child and man-body, mind and spirit” (Pradhan, 2019, p.4). This philosophical thought is deeply connected with the ancient Indian education system, which emphasized a holistic development through auditory, visual and kinesthetic that helped students to learn and retain knowledge effectively. Multisensory learning was a fundamental characteristic of ancient Indian education making learning more engaging and effective. The primary benefits of multisensory learning in ancient Indian education include:

- 1.Improved Memory and Retention:** Reciting Vedic texts and mantras repetitively aloud helps in improving memorization skills by engaging the auditory system.
- 2.Active Engagement:** Using hand gestures (mudras), yoga and dance helps learners to developed motor skills and sensory engagement through physical activities.
- 3.Visual learning Aids:** Symbolic representations and pictographs helps to simplify complex concepts and improve comprehension.
- 4.Experiential Learning:** Experiential learning had practically applied such as agriculture, crafts and trade skills, providing real-world learning and problem-solving abilities.
- 5.Balanced Cognitive Development:** Using multiple senses improves learning styles, making education more inclusive and effective.

4.2.2 Multisensory Learning Approaches in achieving Foundational Literacy and Numeracy goal of NIPUN Bharat Mission

The primary goal of NIPUN Bharat Mission is to ensure that all children in India achieve the desired learning competencies in reading, writing and numeracy by the end of grade 3. Multisensory approach uses multiple senses (sight, sound, touch, movement) to engage learners and enhance understanding and retention of information. Incorporating multisensory approach in teaching can improve Foundational Literacy and Numeracy (FLN) skills by engaging children in visual, auditory, Kinesthetic and tactile learning in following ways.

1. Visual Learning approach

- Using colorful pictures books, flashcards and story maps will improve vocabulary and phonics.
- Using animated videos, interactive digital content and info-graphics will improve concept clarity.

2. Auditory Learning approach

- Using phonics-based learning techniques such as rhymes, songs and chants will improve letter sound recognition.
- Introducing interactive storytelling and read-aloud sessions will help learner understand pronunciation clearly.
- Using peer discussion and group recitations will also strengthen listening and verbal skills.

3. Kinesthetic Learning approach:

- Implementation of hands-on activities such as, tracing letters in sand or creating words with clay will keep learner motivate and engage.
- In the classroom, role-playing and dramatization of stories like music, dance and art with literacy and numeracy will improve memory retention of the learner for long term.
- Using body movement for learning numbers and letters will help the learner deep understanding (e.g., forming letters using hands or whole-body movements).

3. Tactile Learning approach:

- Include touch-based materials such as sandpaper letters, textured number boards, puzzle games and using real objects for counting and measuring (e.g., beads or liquids) will give insight to learner's cognitive development.
- Engagement of students in craft-based learning activities such as letter collages and number models will develop creativity skills.

5. Conclusion

Multisensory learning approach can provide useful insights for improving NIPUN Bharat Mission's objectives. These multisensory techniques not only improved the learning experience in ancient India but also align with modern educational theories demonstrating their lasting relevance. By combining traditional methods with modern pedagogical frameworks, educational system can promote deeper engagement, retention and learning outcomes among young students.

References

Journals

1. Goyal, S., & Aggarwal, P. (2015). Indian Education System: From Ancient Period to Present Era. *Indian Journal of Education*, 5(2), 61-67. DOI: 10.5958/2348-7534.2015.00013.6
2. Mishra, N., & Aithal, P. S. (2023). Ancient Indian education: It's Relevance and importance in the Modern education System. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 7(2), 238-249.
3. Nasar, I. (2024). Exploring Modern Educational Theories: A Literature Review of Student in the digital age. *International Journal Multidisciplinary Science*, 3(3), 83-94. <https://doi.org/10.56127/ijml.v3i3.166>
4. Sethi, C. (2015). Indian education system in ancient India. *International research Journal of Management sociology & Humanity*, 6(6), 350-354. DOI: 10.32804/IRJMSH
5. Syahputri, D. (2019). The effect of multisensory teaching method on the students' reading achievement. *Budapest international Research and Critics in Linguistics and Education*, 2(1), 124-131. DOI: <https://doi.org/10.33258/birle.v2i1.192>
6. Yadav, U. (2018). A comparative study of ancient & present education system. *Education, Sustainability and society*, 1(1), 1-3. DOI: <http://doi.org/10.26480/ess.01.2018.01.03>

Books

7. Chaube, S.P. (2008). History and problems of Indian education. Agrawal publications.
8. Lal, R. B., & Sinha, G. H. (2008). Development of Indian Education and its problems. R. Lal Book Depot.

9. Mangal, S.k. (2016). Advanced educational Psychology. Asoke K. Ghosh.
10. Parsons, R.d., Hinson, S. L., & Brown, D.S., (2001). Educational psychology: A Practitioner-Researcher Model of teaching. Wadsworth Thomas learning.
11. Pradhan, S.K. (2019). Elements of Education. Lucky Publishers, dumuduma.
12. Sharma, R.N. (2018). Philosophy and sociology of education. Surjeet publications.

eBook

13. Montessori, (n.d)., The Montessori method of education.
14. <https://montessoriworld.org/MontessoriMethod.pdf>

Websites

15. NCERT. (2023). <https://ncert.nic.in>
16. SCERT, Delhi (2025). <https://scert.delhi.gov.in/scert/nipun-bharat-0>
17. Srivastava, A., Method of teaching in Vedic education, [LinkedIn page]. Retrieved January 27, 2021. <https://www.linkedin.com/pulse/methods-teaching-vedic-education-dr-aniket-srivastava>
18. Srivastava, A., Vedic Education: Curriculum and teaching method, [LinkedIn page]. Retrieved October 18, 2021. <https://www.linkedin.com/pulse/vedic-education-curriculum-teaching-methods-dr-aniket-srivastava>.

Blog Post

19. “Modern education system.” (2024, December 24). Altera Blog. <https://alterainstitute.com/blog/modern-education-system/>

Magazine Article

20. Harvey, C. (2024). Multisensory teaching. Sen magazine. <https://senmagazine.co.uk/content/specific-needs/dyslexia-spld/22723/multisensory-teaching/>