Toy-Based Pedagogy in the Light of NEP 2020: Primary School Teachers' Perspectives and Implications for Holistic Education

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Abstract

This study investigates primary school teachers' attitudes toward toy-based learning—a pedagogical approach aligned with the holistic and experiential learning principles promoted by India's National Education Policy (NEP) 2020. Employing a descriptive survey method, data were collected from 100 randomly selected primary teachers across various schools, using both surveys and interviews. The research explores teachers' perceptions, identifies implementation barriers, and assesses the impact of professional development on their willingness to adopt toy-based strategies.

Results indicate that while teachers recognize the cognitive, social, and emotional benefits of toy-based learning, practical challenges such as time constraints and limited resources hinder its effective application. The findings emphasize the need for ongoing professional development and enhanced institutional support to equip teachers with the skills and materials necessary for successful toy-based instruction. Ultimately, the study highlights the importance of addressing both attitudinal and resource-related factors to facilitate the wider adoption of toy-based learning in primary education.

Keywords- *Toy-based learning,primary education.*

Background of the study:

The National Education Policy (NEP) 2020 marks a significant transformation in Indian primary education by strongly advocating for holistic, experiential, and play-based learning (Ministry of Education, Government of India & NCERT, 2022). This policy framework emphasizes the integration of toys, games, and hands-on activities as essential tools to make learning more engaging and effective for young children. The rationale for this shift is supported by research showing the positive impact of play on the development of cognitive, social, emotional, and physical skills during the foundational years (Bhumana Srisaila & T.G. Amuthavalli, 2025).

Toy-based pedagogy is increasingly recognized as a powerful teaching strategy that stimulates children's curiosity and creativity while supporting the acquisition of 21st-century skills such as critical thinking, problem-solving, communication, and collaboration (Jani & Sethi, 2024). The National Council of Educational Research and Training (NCERT) has further supported this approach by publishing guidelines and handbooks that detail the use of indigenous and culturally relevant toys to enhance conceptual understanding and holistic child development (Ministry of Education, Government of India & NCERT, 2022).

Despite these policy directives and the proven benefits of toy-based learning, its successful implementation largely depends on the attitudes, preparedness, and resourcefulness of primary school teachers. Research indicates that while many teachers acknowledge the value of toy-based learning, they often encounter practical challenges such as time constraints, limited access to resources, and the need for ongoing professional development (Bhumana Srisaila & T.G. Amuthavalli, 2025). Addressing these challenges is crucial for realizing the full potential of toy-based pedagogy as envisioned by NEP 2020**.**

Emergence of the Problem :

The emergence of the problem stems from the growing advocacy for toy-based learning in primary education, as outlined in frameworks such as the NCERT's Toy-Based Learning Module (Ministry of Education, Government of India & NCERT, 2022). Despite this policy emphasis, there remains a notable gap in research focused on primary teachers' attitudes and perceptions toward the integration of toy-based pedagogy. While existing literature highlights the developmental benefits of toy-based learning for children (Fleer, 2010), little is known about the specific factors that shape teachers' willingness and ability to implement it. Additionally, research on the effectiveness of teacher training programs specifically designed for toy-based learning is sparse (Ministry of Education, Government of India & NCERT, 2022). The challenge is further compounded by the need to understand how teachers balance toy-based learning with traditional curriculum demands, a dynamic that remains largely unexplored. This knowledge gap ultimately impedes the full integration and effective application of toy-based learning in primary classrooms.

Research Questions :

1. *What are the prevailing attitudes of primary school teachers regarding the integration of toy-based learning within classroom instructional practices?*
2. *To what extent do attitudes toward toy-based learning differ between male and female primary school teachers?*
3. *How does participation in specific teacher training programs influence primary school teachers' attitudes toward the adoption of toy-based learning strategies?*

Objectives of the Study:

1. To evaluate the attitudes of primary school teachers concerning the adoption and integration of toy-based learning in classroom instruction.
2. To analyze and compare primary school teachers' attitudes toward toy-based learning across key demographic and professional variables, specifically gender and participation in relevant teacher training programs.

Methodology of the Study:

The present investigation adopted a descriptive survey research design to systematically assess and interpret the prevailing attitudes, beliefs, and perceptions of primary school teachers regarding the concept of toy-based learning. Given the objective of quantifying teacher attitudes and comparing them across relevant variables, the study employed a quantitative approach to data collection and analysis.

Population and Sampling:

The target population for this study comprised all primary school teachers working within the Barabanki district of Uttar Pradesh.A sample of 100 primary school teachers was selected from this population using stratified random sampling. This sampling technique was chosen to ensure adequate representation of key subgroups such as gender and participation in teacher training programs thereby enhancing the validity and generalizability of the findings.

Data Collection:

Data were collected through structured survey instruments designed to measure teachers' attitudes toward toy-based learning. The survey included items addressing perceptions, implementation challenges, and the influence of professional development experiences. The use of a quantitative methodology facilitated the analysis of patterns, comparisons across subgroups, and the identification of significant relationships among variables relevant to the adoption of toy-based pedagogy in primary education.

Table 1-Distribution of the sample on the Basis of Gender

DistributionofthesampleontheBasisofGender		
S.No.	**Gender**	**No.ofTeachers**
1.	Male	50
2.	Female	50

Table 2-DistributionoftheSampleontheBasisofTrainingProgram

DistributionoftheSampleontheBasisofTrainingProgram		
Sr.No.	**TrainingProgram**	**No.ofTeachers**
1.	B.Ed.	58
2.	D.El.Ed./BTC	42

Tool Used in the Study:

For the purpose of data collection, a self-constructed instrument titled the **"**Toy-Based Learning Attitude Scale" was utilized. This scale was specifically designed to assess primary school teachers' attitudes toward the integration of toy-based learning within classroom settings. The reliability of the instrument was determined through the calculation of Cronbach's alpha, yielding a coefficient of 0.70, which indicates a high level of internal consistency and reliability for the scale.

Distribution of Primary School Teachers on The Basis of Demographic Variables

The total number of primary school teachers considering all variables in 100. In this table, the distribution of primary school teacher sccoring to their demographic variable, given below:

Table 3-Demographic Variables wise Distribution of the Sample

Demographic Variables wise Distribution of the Sample			
Categories	**Variables**	**Frequency**	**Percentage**
Gender	Male	50	50.00%
	Female	50	50.00%
TrainingProgram	B.Ed.	58	58.00%
	D.El.Ed./BTC	42	42.00%

Analysis and Interpretation:

Objective 1: Attitudes of Primary School Teachers Toward Toy-Based Learning

To investigate the attitudes of primary school teachers regarding the incorporation of toy-based learning in classroom settings, data collected using the "Toy-Based Learning Attitude Scale" were subjected to descriptive statistical analysis. The analysis revealed that teachers' raw scores on the attitude scale ranged from 33 to 125, with a mean score of 110.85 (SD = 12.83). These results suggest a generally high level of positive disposition among respondents toward the use of toy-based learning strategies. Further examination of the attitude distribution indicated that 97% of the participating teachers demonstrated a "positive attitude" toward toy-based learning, while 2% exhibited a "neutral attitude," and 1% displayed a "negative attitude." These percentages were computed based on a sample size of N = 100, ensuring a robust representation of the population studied.

Collectively, these findings underscore a strong receptivity among primary school teachers toward the integration of toy-based learning in classroom environments. The high mean score and the predominance of positive attitudes reflect a favorable outlook that is conducive to the adoption and implementation of toy-based pedagogical approaches within primary education.

Table 4-Frequency Distribution Table of Attitude Scale

Frequency Distribution Table of Attitude Scale				
S. No.	**Range of Mean of RawScore**	**Frequency**	**Percentage (%)**	**Interpretation**
1	**3.5to 5.0**	97	97%	**PositiveAttitude**
2	**2.5to 3.4**	2	2%	NeutralAttitude
3	**1.0to 2.4**	1	1%	NegativeAttitude

Objective 2: Gender Differences in Attitudes toward Toy-Based Learning

To examine potential differences in attitudes between male and female primary school teachers regarding toy-based learning, mean scores on the attitude scale were compared. Analysis revealed that female teachers exhibited a slightly higher mean attitude score (M = 111.86) than their male counterparts (M = 110.12). However, an independent samples t-test indicated that this difference was not statistically significant at the 0.05 level.

Consequently, the null hypothesis that there is no significant difference in the attitudes of male and female teachers toward toy-based learning was not rejected. This finding suggests that gender does not play a significant role in shaping teachers' attitudes toward the integration of toy-based learning strategies in primary school classrooms.

Table 5-PrimarySchoolTeachers'AttitudeacrosstheirGender

PrimarySchoolTeachers'AttitudeacrosstheirGender							
GENDER	**Number of Students (N)**	**Mean**	**Standard Deviation**	**Degree of Freedom**	**t-value (calculated)**	**t-value (critical)**	**Significance level**
Male	50	110.12	15.2605	98	0.6757	1.98	0.05
Female	50	111.86	9.93245				

Objective 3: Comparison of Attitudes Based on Teacher Training Program

To assess whether the attitudes of primary school teachers toward toy-based learning differ depending on the type of teacher training program completed, mean attitude scores were compared between two groups: those who had undergone D.El.Ed/BTC training (M = 109.62) and those who had completed a B.Ed. program (M = 111.98). Although the mean score for teachers with B.Ed. training was slightly higher, an independent samples t-test revealed that this difference was not statistically significant at the 0.05 level.

As a result, the null hypothesis—that there is no significant difference in the attitudes of primary school teachers toward toy-based learning based on the type of teacher training program pursued was not rejected. This indicates that, within the present sample, the specific teacher training program does not significantly influence teachers' attitudes toward the adoption of toy-based learning in classroom settings.



Table 6-PrimarySchoolTeachers'AttitudeacrosstheirTrainingProgram

PrimarySchoolTeachers'AttitudeacrosstheirTrainingProgram							
Training Program	**Number of Students (N)**	**Mean**	**Standard Deviation**	**Degreeof Freedom**	**t-value (calculated)**	**t-value (critical)**	**Significance level**
B.Ed.	58	111.98	10.3745	66	0.85	1.9	0.05
D.ElEd	42	109.61	15.6563				

Findings of the Study :

The findings reveal that an overwhelming majority of primary school teachers—97%—exhibit a positive attitude toward the integration of toy-based learning within classroom environments. Only a small proportion of respondents reported neutral (2%) or negative (1%) attitudes toward this pedagogical approach. These results indicate a strong receptivity among educators to the incorporation of toy-based learning, which aligns with the broader educational goals of fostering holistic development and 21st-century skills among students, as advocated by recent policy initiatives such as the National Education Policy (NEP) 2020 (Ministry of Education, Government of India & NCERT, 2022; Bhumana Srisaila & T.G. Amuthavalli, 2025).

The study further examined whether attitudes toward toy-based learning varied according to key demographic and professional variables, specifically gender and the type of teacher

training program completed. Statistical analyses, including independent samples t-tests, indicated that while there were slight differences in mean attitude scores between male and female teachers, and between teachers with different training backgrounds, these differences were not statistically significant. This suggests that, within the present sample, neither gender nor the specific teacher training program significantly influenced teachers' attitudes toward toy-based learning.

Collectively, these findings underscore the robust receptivity among primary school teachers toward toy-based learning, which is supported by contemporary research highlighting its effectiveness in promoting critical thinking, creativity, collaboration, and emotional well-being among young learners (Jani & Sethi, 2024). However, the findings also highlight the need for further investigation into the practical challenges and contextual factors that may influence the effective implementation of this innovative teaching method.

Educational Implications of the Study:

The findings of the present study have important educational implications, particularly in the context of the National Education Policy (NEP) 2020, which strongly advocates experiential, play-based, and holistic learning at the foundational and primary stages. The overwhelmingly positive attitude of teachers toward toy-based pedagogy indicates a strong readiness for its classroom integration. This favorable disposition provides policymakers and school leaders with a supportive environment to strengthen the implementation of NEP 2020 reforms. Since teachers are key agents of change, their positive orientation suggests that large-scale adoption of toy-based learning is both feasible and sustainable if supported appropriately.

The study also implies the need for systematic and continuous professional development programs focused specifically on the practical aspects of toy-based pedagogy. Although teachers expressed positive attitudes, effective classroom implementation requires hands-on training, demonstration lessons, curriculum integration strategies, and assessment techniques aligned with play-based methods. Teacher education institutions and in-service training bodies such as DIETs and SCERTs should incorporate structured modules on toy-based learning, including the use of indigenous and low-cost teaching-learning materials, to bridge the gap between theoretical acceptance and practical execution.

Furthermore, the findings highlight the importance of institutional and infrastructural support. Schools must be equipped with adequate teaching-learning materials, toy libraries, and flexible classroom spaces that encourage activity-based learning. Administrative support in terms of reduced curricular pressure, flexible timetables, and encouragement of innovative practices will further enhance teachers' ability to adopt toy-based strategies effectively. Without such systemic support, positive attitudes alone may not translate into meaningful pedagogical transformation.

Another important implication is related to curriculum and assessment reform. If toy-based pedagogy is to be meaningfully integrated, evaluation systems must also align with experiential

learning outcomes such as creativity, collaboration, problem-solving, and socio-emotional development. Traditional rote-based assessment practices may discourage teachers from fully adopting play-based approaches. Therefore, assessment frameworks should reflect the holistic developmental goals emphasized in NEP 2020.

Finally, since the study found no significant differences in attitudes based on gender or type of teacher training program, toy-based pedagogy can be promoted uniformly across different teacher groups. This suggests that policy interventions and training initiatives can be designed inclusively without the need for demographic differentiation. Overall, the study underscores that while teacher attitudes are highly supportive of toy-based learning, sustained professional development, adequate resources, curriculum alignment, and systemic encouragement are essential to translate this positive orientation into effective classroom practice and meaningful holistic education reform.

Conclusion :

This study has demonstrated that a significant majority of primary school teachers—97%—hold a positive attitude toward the implementation of toy-based learning in their classrooms. The high level of teacher receptivity likely reflects an awareness of the pedagogical advantages of this approach, which aligns with contemporary educational priorities emphasizing holistic child development through the integration of cognitive, physical, social, and emotional learning experiences (Ministry of Education, Government of India & NCERT, 2022; Bhumana Srisaila & T.G. Amuthavalli, 2025).

The findings also indicate that neither gender nor the type of teacher training program significantly influences teachers' attitudes toward toy-based learning. This suggests that both male and female teachers, as well as those from different training backgrounds, recognize the value of toy-based pedagogy, possibly due to their direct observations of its beneficial impact on student engagement and development.

Overall, the study underscores the potential for toy-based learning to be widely and successfully adopted in primary education. To maximize the effectiveness of this pedagogical innovation, ongoing support in the form of professional development and resource provision will be essential. Further research should continue to investigate the specific factors that facilitate or hinder the practical implementation of toy-based learning in diverse educational contexts.

References :

Bhumana Srisaila, & T.G. Amuthavalli. (2025). Importance of toy based pedagogy at primary school level. JYANAVI, 1(1), Sri Padmavati Mahila Visvavidyalayam, Tirupati, Andhra Pradesh, India.

Fleer, M. (2010). Early learning and development: Cultural-historical concepts in play. Cambridge University Press.

Fullan, M. (2007). The new meaning of educational change (4th ed.). Teachers College Press.

Guskey, T. R. (2002). Professional development and teacher change. Teachers and Teaching, 8(3), 381–391. https://doi.org/10.1080/135406002100000512

Hedges, H. (2000). Teaching in early childhood: Time to merge constructivist views so learning through play equals teaching through play. *Australasian Journal of Early Childhood, 25*(4), 16–21.

Jani, B., & Sethi, J. (2024). Toy based pedagogy promotes 21st century skills in school and beyond: A new path to education reform. *International Journal of Social Science and Human Research, 7*(4).

Ministry of Education, Government of India, & National Council of Educational Research and Training (NCERT). (2022). *Toy-based pedagogy: A handbook.* NCERT.

National Council of Educational Research and Training (NCERT). (2022). *Toy-based pedagogy: A learning resource.* NCERT.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62*(3), 307–332.

Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research, 72*(3), 387–431.

Wood, E. (2014). Free choice and free play in early childhood education: Troubling the discourse. *International Journal of Early Years Education, 22*(1), 4–18.