

# A shift in paradigm in early childhood education: is play-based learning the answer?

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## ABSTRACT

This paper highlights the importance of innovative solutions and interventions in the field of school education in India to actualise the aims of the Right to Education, National Education Policy (NEP) of 2020 as well as Sustainable Development Goal 4 of the United Nations. One such solution is the intersection of the Right to Play with the Right to Education, specifically in the early years of education. Article 31 of the United Nations Convention on the Rights of the Child declares the Right to Play as a fundamental right of every child and emphasises the importance of play in the holistic development of a child. Since the act of play comes naturally to most children and is something that they enjoy immensely, it only makes sense to bring the two together in order to achieve the objectives of Article 31. Play-based learning in early childhood education not only gives the children a chance to learn while playing but also

teaches them some very important life skills such as decision-making, self-motivated learning and cooperation, along with honing their social and emotional skills.

The paper goes on to highlight the Montessori methods of learning in schools. These are mostly found in private schools in India, especially Delhi, and the authors believe that to be able to make such a method available to the masses, it is imperative that Montessori methods are also introduced in government schools. A case study of a Montessori lab established within a Delhi government school is discussed and analysed, through primary research, by assessing it against the Developmental Milestones Framework, which emphasises growth in five areas: cognitive, social, emotional, physical and language. Since the lab has been established for a primary school, the relevance of introducing

## KEYWORDS

**PLAY-BASED LEARNING**

**QUALITY EDUCATION**

**EARLY CHILDHOOD CARE AND EDUCATION**

**MONTESSORI METHOD**

such interventions in the primary years through a focus on early childhood care and education (ECCE) is validated. It is further discussed that in the post-pandemic era, the importance of play-based education in ECCE is gaining more prominence, since it is now widely accepted that even within education, foundational education is extremely important in order to achieve quality education.

### INTRODUCTION

One thing that is inseparable from children is playing. Children will capitalise on any occasion to engage in acts of play, whether it is in their homes, in school or out in the community. Play is an important factor in the holistic development of a child. It contributes to not just their physical well-being, but also their cognitive, social and emotional health (Shaughnessy & Kleyn, 2012). The importance of play has been further highlighted and validated by the United Nations High Commission for Human Rights through the UN Convention on the Rights of the Child (UNCRC) of 1989. Article 31 of this convention states that children have the right 'to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts' (UNICEF, 1989). The Government of India ratified the UNCRC in 1992, thereby acknowledging children's right to play as a fundamental right.

The Right to Free and Compulsory Education Act 2009 gives all children in India the right to study and acquire education. However, the act, along with the National Education Policy (NEP) of 2020, also emphasises quality and apt education, which resonates with Sustainable Development Goal 4 of the United Nations. To realise this policy through effective implementation, educationists around the country have been working on innovative solutions in order to bridge the gaps that are often faced during the implementation of policies (WEF 2022). Given the wide and persistent social, cultural and economic inequalities in India, it often becomes difficult to actualise the policies on the ground. This is why, though India has a wide range of interventions intended to achieve education for all, there is still a long way to go when it comes to providing *quality* education to all (World Bank, 2019).

One innovative idea to help improve the quality of education for children is to recognise the importance of play

and intersect it with education through play-based learning in schools. This implementation has been seen in Montessori schools, where education is based on hands-on learning, self-directed activity and collaborative play (Marshall, 2017). However, most of the Montessori schools in India are private schools that incur a fee and, therefore, are not accessible to all, due to economic factors. Hence, it is imperative to implement such solutions in government schools as well, because they offer free education. Many interventions by governments in India are mainstreamed, in the wake of NEP 2020, to emphasise and implement play-based methods in the form of Vidya Pravesh, Balvatikas and Jadui Pitara, etc. To assess whether these programmes actually hold the capacity to bring positive influence through implementation, a case study of a Montessori lab in a Delhi government school is analysed in this paper. The analysis of the Montessori lab is done using the five domains – physical, social, emotional, cognitive and language development – used by the Australian Children's Education & Care Quality Authority as the Developmental Milestones Framework (ACECQA, 2018).

Budget 2022–3 of the Government of National Capital Territory (NCT) of Delhi announced the decision to establish 100 Montessori labs across government schools in Delhi<sup>1</sup>. These Montessori labs for primary school children demonstrate the state government's intention to strengthen foundational education through early childhood care and education (ECCE), hence, ensuring quality education. The focus on ECCE through Montessori also marks a significant attempt towards attaining play-based learning.

### BACKGROUND

The importance of a strong foundation for the overall growth and development of children is undeniable (UNESCO, 2023). At the national level in India, NEP 2020 pays significant attention to Foundational Literacy and Numeracy (FLN) (Gol, 2020)

which has come to be regarded as the most critical pillar of education in the highest of forums, including the recent G20 summit held at New Delhi in 2023. To accelerate learning in early years, the use of play-based and experiential learning has gained popularity since children are expected to be able to enjoy the learning process with the help of play. Within ECCE, the focus on play-based learning is all the more vital in the present era, when children are recovering from the pandemic losses. India experienced one of the longest periods of school closures during Covid-19 (NUS Institute of South Asian Studies (ISAS) 2021). The children missed nearly two years of schooling, which meant missing crucial years of learning with peers and building social interactions in schools. In some cases, students are experiencing schooling for the first time in their lives even though they started schooling a few years ago.

Within Delhi, students in government schools come from different socio-economic backgrounds. Their access to material resources for learning is often limited at home. It then becomes the responsibility of the government to provide adequate interventions for fostering and nurturing the overall growth of every child and making quality education accessible. Thus, the decision to intervene, in the area of ECCE, with reformatory measures, becomes a necessary step (Ministry of Women and Child Development, n.d.).

The Government of NCT of Delhi recognised the learning challenges and how the pandemic constrained the mobility of children. So it transformed this challenge into an opportunity by strategising to move beyond the pandemic. Following the guidelines laid down in the NEP, this change in approach led to the inclusion of play-based learning, promoting the child's right to play. The ecosystem was planned to create a space where children in pre-primary and primary years (classes 1 and 2 in primary), aged three to six, are provided with a platform to spend their

time experiencing hands-on learning with access to playful material/toys. This motivation led to the incorporation of the methods of Maria Montessori that were scientifically proven to be effective. These learning interventions are known to support the child's social, emotional, physical and intellectual development, contributing to whole-child development. They also stand in line with Article 31 of the UNCRC which emphasises the right to play because the act of play contributes heavily to the holistic development of a child. It further demonstrates sustainable solutions advocating Sustainable Development Goals, especially Goal 4 on quality education.

## MONTESSORI LAB: PAVING THE WAY FOR PLAY-BASED LEARNING

The roots of Montessori go back to the early 20th Century. Maria Montessori was an Italian educator whose educational understanding led to the establishment of the first Casa dei Bambini (Children's House) in 1907. Her philosophy influenced child-centric learning and the creation of child-friendly spaces (Walker & Hogan, 2012). The emphasis, in her work, on impacting the foundational years of the child through hands-on learning experience, inspired the decision of the administration in Delhi to incorporate the Montessori model in a government school for the intersection of the right to play with education. The model influenced by the work of Maria Montessori, therefore, paved the way for the establishment of the first Montessori lab in a Delhi government school, which was inaugurated on 8 March 2022. The Montessori lab was piloted to bridge the pandemic-induced learning losses, keeping in view building an environment of resources with child-friendly characteristics. The lab, formalised after careful primary and secondary research, is a place of experimentation for the children to engage in playful activities that act as learning resources for their overall growth.

The NEP 2020 vision propagates play-based, inquiry-based and activity-based learning. The incorporation of the Montessori model through the lab enhances the vision of the policy as children, daily, spend a considerable time in the lab complementing their normal engagements. The policy document commits to making children school-ready, fulfilling the objectives of the NEP by providing a robust ecosystem bringing the whole-child framework<sup>2</sup> to the mainstream agenda. To ensure quality education for all, the education system requires a vigorous transformation starting from the foundational level, further highlighting the importance of early childhood care and education.

The Montessori lab, operational in the pilot school, allows the children to exercise the right to play by spending quality time (two to three hours daily) harnessing their freedom. The learnings that children gain from spending time in the Montessori lab complement their learnings from conventional school activities. The term 'playing' is interchangeable with 'learning' as the objects/toys/learning apparatus in the lab are selected to directly or indirectly impact the learning outcomes. The children freely play with resources that support their learning areas of practical life, sensory, numeracy and language. Engagement with playful resources in the lab directly influences the development of fine and gross motor skills. In alignment with the philosophy of Maria Montessori, the lab aims to focus on holistic development by emphasising independence and respect for each child. The lab provides a unique opportunity for children, with the autonomy to choose their learning resources and learn through self-corrective methods. As a place of experimentation, it has an innovative character in the practice of developing a sustainable precedent for ECCE.

## OBJECTIVES OF THE MONTESSORI LAB: AN APPROACH TO ACHIEVE QUALITY EDUCATION

There are multiple ways to assess the impact of an early years intervention, but to analyse whether it is able to bring about holistic development of the children, it is imperative to map progress against the five developmental domains – physical, social, emotional, cognitive and language development – as highlighted by the Developmental Milestones Framework. It is important to note that these domains are in line with those mentioned in the National Curriculum Framework for School Education (NCF-SE) 2023 of India that map out the Panchakosha Vikas, the fivefold development, which consists in developing the physical layer, life force energy layer, mind layer, intellectual layer and the inner self.

To understand whether the Montessori lab programme is able to provide development in all five domains, a group survey was conducted of the teachers associated with the Montessori lab. The following paragraphs highlight the findings from the survey.

- 1. Physical development:** By engaging children in different physical activities, the lab is able to directly support the fine and gross motor skills of the children. Teachers highlighted that children become more aware of their environment and are able to engage with different learning materials. Since they take up activities at their own pace, the autonomy provides them with the independence to learn on their own, with teachers performing observing roles. They participate in practical life-skills-based activities such as spooning, threading and sweeping, etc., which help in developing their fine motor skills. Moreover, through various sensory activities, they are able to refine their senses of touch, sight, sound, smell and taste.

- 2. Social development:** We are firmly in the age of digital reliance in the wake of the pandemic. The sudden shift to digital education due to the closure of schools has deprived children of their right to play and education. They have been stuck in front of a digital device during the online learning mode (Global Education Monitoring Report 2023). This has had many consequences including limited social interaction. Humans are collective beings and schools are institutions that transform individuals into a social group, but the increase in technological dependence has limited social interactions among children. Children, especially in their early years, have not been able to make friends, and their first friend might be a digital device during the pandemic. Therefore, with the purpose of encouraging social interactions, the Montessori lab creates a space for mobility and interaction for the children in which they play and learn in a collective fashion. As expressed by one of the teachers, where interactions in a standard classroom setting are still slightly difficult, the same can be much more easily achieved in a play-based set-up such as the Montessori lab.
- 3. Emotional development:** In a play-based learning set-up, the students are active learners who adopt self-corrective methods under the guise of play. Then, as the children take ownership of their own learning, this instils confidence in them and makes learning enjoyable for them. The abilities developed in children through play-based learning also contribute to self-discipline, communication, teamwork, critical reasoning, problem-solving abilities and much more. Furthermore, by participating in various activities, children are able to identify the different emotions that they feel, and even express them properly to their teachers and peers.
- 4. Cognitive development:** Most of the activities in the lab, while explicitly aiming to improve other important skills

such as physical and socio-emotional skills, also implicitly help children develop their cognitive abilities. In the Montessori lab, through activities such as block building, geometric solids and colour boxes, children slowly improve their knowledge about the world, along with their logical reasoning abilities. One teacher noted that such activities also have a positive influence on their attention spans. Teachers point out that the mathematical activities have a huge impact on their ability to count, identify and match numerals to quantities and their awareness of the basic functions of addition, subtraction, multiplication and division.

- 5. Language development:** By engaging with their peers and teachers, and by taking the initiative to complete activities by themselves, children are able to improve their language skills. Through various language-related activities at the lab, they learn about phonetics, letter identification and formation, and how to form words and simple sentences. In order to achieve perfection through practice, the Montessori lab provides a platform for children to communicate effectively and confidently that, in turn, helps them in improving their language skills.

### CONCLUSION: TOWARDS DESIRABLE OUTCOMES

The journey to make quality education available and accessible to all requires a lot of innovative ideas. Moreover, innovative solutions are imperative to translate the policy requirements into on-ground implementation. With vast inequalities and students coming from all walks of life, it becomes very difficult to ensure that each child enjoys a quality, apt education. In such a scenario, bringing together play with education becomes an all-encompassing approach since children always find themselves interested in playing. So instead of forcing students through a rigorous, conventional schooling system that does not cater to

the different needs of different children, bringing in play-based learning offers the answers to attaining quality education for all. Providing such a solution to government school children becomes a revolutionary step towards bridging availability of learning opportunities for children studying in government schools.

The Montessori lab in the Delhi government school has been functional in the pilot school since March 2022. Teacher coordinators provide insights into the effectiveness of the lab in transforming the lives of children. They affirm the significance of ECCE in the lives of the children as it provides a strong foundation for holistic and overall development. The inclusion of play and activities in ECCE helps a child to cope with emotions. Teachers experienced that children through play are better able to handle their negative emotions such as fear, failure, anger, frustration, etc. The play-based learning in the lab is enhancing the capabilities of the children as it motivates them to do better by instilling a sense of achievement after accomplishing a task/game. The teachers also confirm that play-based learning is a feasible practice in the lives of the children, facilitating better concept formation through their hands-on experience with different learning materials for better adaptation of lessons in future.

The shift in approach towards encouraging the child's right to play and learn led to diverse contributing results. It is observed that children are motivated to come to school. They enjoy their interaction and are intrigued by engaging with the playful materials. The Delhi government, with the initiative of the Montessori model, has set a benchmark in bringing in impactful solutions to ensure quality education. Ultimately, it marks a drastic shift in early childhood education within the country, where play-based learning has become the primary mode of learning for young learners. ■

## NOTES

1. See [https://finance.delhigovt.nic.in/sites/default/files/Budget-2022-23\\_English.pdf](https://finance.delhigovt.nic.in/sites/default/files/Budget-2022-23_English.pdf)
2. See <https://www.wholechildpolicy.org/>

## REFERENCES

- Australian Children's Education & Care Quality Authority (ACECQA) (2018) 'Developmental milestones and the Early Years Learning Framework and the National Quality Standards' Online: <https://www.acecqa.gov.au/sites/default/files/2018-02/DevelopmentalMilestonesEYLFandNQS.pdf> [accessed 7 October 2023]
- Danniels, E. & Pyle, A. (2022) 'Inclusive play-based learning: approaches from enacting kindergarten teachers'. *Early Childhood Education Journal*, 51(7), 1169–79.
- Global Education Monitoring Report (2023) 'Technology in education'. Online: <https://www.unesco.org/gem-report/en/technology>
- Government of India (GoI) (2020) 'National Education Policy'. Online: [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Marshall, C. (2017) 'Montessori education: a review of the evidence base'. *Science of Learning*, 2(11) <https://www.nature.com/articles/s41539-017-0012-7>
- Ministry of Women and Child Development (n.d.) 'National Childhood Care and Education (ECCE) Curriculum Framework'. Online: [https://wcd.nic.in/sites/default/files/national\\_eccce\\_curr\\_framework\\_final\\_03022014%20%282%29\\_1.pdf](https://wcd.nic.in/sites/default/files/national_eccce_curr_framework_final_03022014%20%282%29_1.pdf) [accessed 10 December 2022]
- Montessori, M. (n.d.) 'The Montessori method'. Online: [https://www.goodreads.com/work/best\\_book/362344-metodo-della-pedagogia-scientifica](https://www.goodreads.com/work/best_book/362344-metodo-della-pedagogia-scientifica) [accessed 18 October 2022]
- NUS Institute of South Asian Studies (ISAS) (2021) 'Education during the COVID-19 pandemic in India'. Online: <https://www.isas.nus.edu.sg/papers/education-during-the-covid-19-pandemic-in-india/>
- Shaughnessy, M. & Kleyn, K. (2012) 'The importance of early childhood education'. In M. Shaughnessy & K. Kleyn (eds.) *Handbook of early childhood education*, pp. 1–9. New York: Nova Science Publishers.
- UNESCO (2023) 'What you need to know about early childhood care and education'. Online: <https://www.unesco.org/en/education/early-childhood/need-know> [accessed 10 December 2022]
- UNICEF (1989) 'Convention on the Rights of the Child'. Online: <https://www.unicef.org/child-rights-convention> [accessed 10 December 2022]
- Walker, A. S. & Hogan, J. D. (2012) 'Montessori, Maria'. SpringerLink. Online: [https://link.springer.com/referenceworkentry/10.1007/978-1-4419-0463-8\\_268](https://link.springer.com/referenceworkentry/10.1007/978-1-4419-0463-8_268) [accessed 10 December 2022]
- World Bank (2019) 'India: learning poverty brief'. Online: <https://thedocs.worldbank.org/en/doc/386361571223575213-0090022019/original/SASSACININDLPBRIEF.pdf>
- World Education Forum (WEF) (2022) 'Education 4.0 India'. Online: [https://www3.weforum.org/docs/WEF\\_Education\\_4.0\\_India\\_Report\\_2022.pdf](https://www3.weforum.org/docs/WEF_Education_4.0_India_Report_2022.pdf)