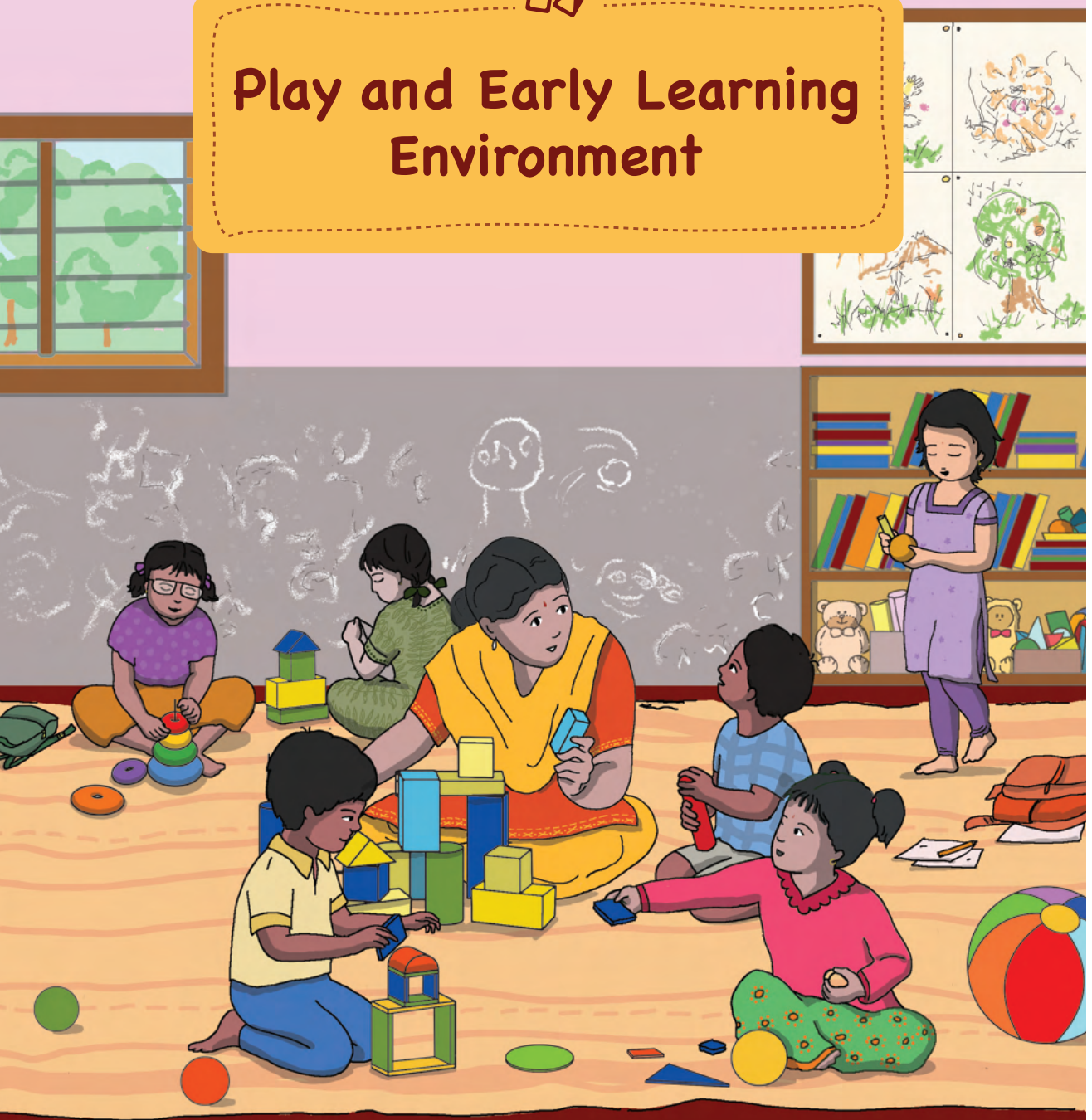
Education for the
Foundational Stage

Azim Premji University

Play and Early Learning Environment



Edited by
Jigisha Shastri | Kinnari Pandya

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From the Vice Chancellor's Desk

It is now clear that development and learning in the early years are critical to a child's life outcomes. The strong emphasis on high quality early childhood care and education for all children and the new design of the Foundational Stage in school education in the National Education Policy 2020 bears testament to this.

Learning in the early years has been a priority at Azim Premji Foundation. Our work with the public education system across the country has a strong focus on both Anganwadis and the early school years (Grades 1 and 2). This work happens in over 302 Blocks of 57 districts in 7 states (Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Rajasthan, Telangana, and Uttarakhand).

We began our work with Anganwadis in Sangareddy, Telangana, in 2014. Our focus was to work closely with Anganwadi teachers and help ensure that Anganwadis become vibrant learning centers for children through good teaching practices and using appropriate learning material. We started by supporting a small number of Anganwadis - that has now grown to all the 1500 Anganwadis in the district.

In this process, there were many significant changes e.g., improved attendance, full participation of children, high energy in the classroom, noticeable development in children's abilities across domains. The curriculum, teaching-learning resources and teacher development modules developed through this process are used extensively in all our work across the country. Some states have used this as a basis to revise their curriculum and professional development programmes for Anganwadi teachers.

At our University as well, early childhood education is a critical area of teaching and research. We offer master's programmes, a post graduate diploma for working professionals and short programmes for practitioners in the area.

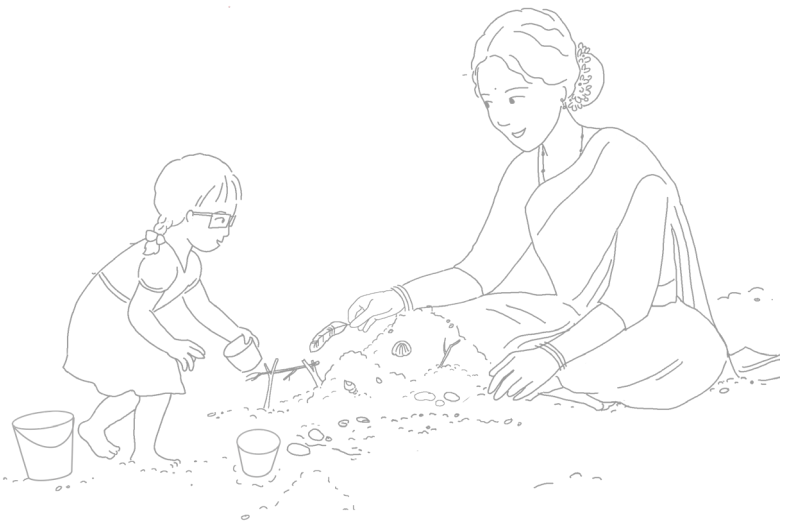
Given this context of the importance of the area, a symposium was organised at Azim Premji University, Bengaluru in February 2024, where a large group of teachers, practitioners, academics, researchers, and students of early childhood education shared their experiences and ideas.

This has led to a three-part series;

Volume 1: Education for the Foundational Stage: Play and Early Learning Environment
Volume 2: Education for the Foundational Stage: Foundational Language, Literacy and Math
Volume 3: Education for the Foundational Stage: Inquiry-based Learning and Assessment

I am sure that this series will be both insightful and useful for all those working with young children across the country.

Indu Prasad
Vice Chancellor
Azim Premji University, Bengaluru



Foreword

Care and education of children in the early years has emerged as an important area of interest in India particularly after the National Education Policy (NEP) 2020 emphatically stated that the foundational years (3 to 8 years) is the most important stage for children's development and learning and that the country must strive towards achieving optimal outcomes for all the children in this age group in different domains of their development. Further, the National Curriculum Framework-Foundational Stage (NCF-FS, 2022) provided a detailed roadmap for achieving this end by framing guidelines for a curricular and pedagogical structure that places 'play' at its centre for organising content for the early years while giving equal importance to inquiry-based learning and foundational literacy and numeracy. Extensive research in the disciplines of cognitive and neurosciences has contributed to arriving at an understanding about the critical role that the early years can play in young children's development.

While the policy provides a clear direction and a way forward, the challenges in implementing the recommendations are undoubtedly enormous given the sheer scale and complexity of the Indian context. Several existing systems and programmes would need to be strengthened and new structures established to pave the way for the desired change to happen. While the magnitude of the problem at hand is not lost to anyone, we often tend to ignore another impediment that can come in the way of effective implementation of the policy recommendations. It is the knowledge gap, the lack of availability of systematic, reliable research and practice-based literature on Early Childhood Care and Education (ECCE) that is rooted in the Indian context. This knowledge, originating from practices embedded in India's rich traditions, linguistic diversity and socio-cultural plurality is critical for informing the curricular and pedagogical decisions that we need to take for attaining optimal outcomes for children in different domains of their development. The paucity of this knowledge has prevented us so far from building a rich discourse around what play-based or inquiry-based learning means in the Indian context or what are the challenges of building foundational literacy in a multilingual society such as ours. It is absolutely critical that we shed the hegemony of Western supremacy in this regard and stop seeking answers to these compelling questions from the global North and instead build our own body of knowledge that is rooted in our local contexts.

It may be useful to mention here that while India has had a rich tradition with luminous thinkers like Gijubhai Badheka, Tarabai Modak, Mahatma Gandhi and Rabindranath Tagore contributing to an Indianised vision of early years education, there have been few systematic efforts to research and document ECCE practices. A part of this can be attributed to the poor interest shown by higher educational institutions in engaging with the discipline in meaningful ways for many years. With only a handful of good quality

master's and doctoral programmes available in the country that offer degrees in the discipline, there has been a vacuum of knowledge creation in the area. Add to this the silos within which academia usually operate with very few opportunities for practitioners on the ground to rub shoulders, on equal terms with academics in ways that are not dismissive of their wisdom and the tacit understanding that they bring to the table.

To break these silos, it is important for different actors and stakeholders interested and involved in the pursuit of scholarship, research, and practice of early childhood care and education in India to come together for exchange of knowledge and ideas gathered from their rich and diverse experiences on the ground. On a level playing field, where all the actors are seen as equal and are treated with respect, these opportunities should lead to knowledge production about critical questions that confound us- for instance, how do we conceptualise curricular and pedagogical processes that are play-based for the foundational stage in the Indian context? Or how do we draw linkages between practices in the Indian context to theoretical perspectives and global discourses in ECCE? How can curricular practices weave the diversity of children's experiences and contexts into everyday learning, and many other such questions.

Given this context, a symposium organised at the Azim Premji University, Bengaluru in February 2024 provided a platform to academics, practitioners, researchers, teachers and students of early childhood education to deliberate on questions that are pertinent for realising the curricular recommendations of the NEP 2020 and the NCF-FS 2022. A timely and requisite initiative, the symposium became an opportunity for practitioners and academics from different parts of the country, working under varied conditions to discuss important issues from their respective vantage points, giving each the opportunity to learn from the other.

As an attendee of the symposium, I was particularly struck by two things. One, the range of topics and the variety of rich experiences that the participants brought to the event and two, that a majority of the presentations had an underlying optimism, indicating that despite all the impediments, there were several, albeit small, initiatives and practices that were working well and that these success stories were a beacon of hope for all such efforts and experiments that were being tried out in different contexts and parts of the country. It also indicated to me that despite not having a rich repository of documented literature, as a country we have come a certain distance and maturity as far as our understanding of ECCE is concerned. All the participants, irrespective of their affiliations and backgrounds, participated in the rich discussions that ensued, valuing the sharing of knowledge and the opportunities such exchanges opened for theorising one's own experiences.

As the symposium drew to a close, the prevalent sentiment was the appreciation of such opportunities for exchange of knowledge and the need to preserve the learning that emerged from the proceedings. This resulted in the idea of publishing the papers presented at the Symposium in the form of a series of papers titled, *Education for the*

Foundational Stage. The series is a rich repertory of a wide range of papers in terms of topics that they cover as well as their treatment. For instance, while there are descriptive case studies on experiments with play-based pedagogy, Foundational Literacy and Numeracy (FLN), and social-emotional learning, there are empirical and analytical papers that critically examine curricular choices for children in difficult circumstances. The value of contextualising learning for young children comes out strongly in the series through papers documenting the search for indigenous play materials and games, experiments with teaching in the mother tongue or preparing assessment tools to assess school readiness in local languages. I sincerely hope that the papers in the three volumes would be useful for everyone committed to the field of early childhood care and education, irrespective of their affiliation or allegiance and contribute to filling the critical knowledge gap.

The opportunity to write the Foreword for this series is a privilege for me. As an academic situated in a university that has held its place and commitment to public good above all else, this series is an important testament to the role that the Azim Premji University has always strived to play in bridging the proverbial theory-practice divide and in breaking the silos that exist between the worlds of academia and practice.

Ankur Madan
Director
School of Education
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Editorial Team for the Education for Foundational Stage Series

1. Aruna Jyothi V
2. Ira Joshi
3. Jigisha Shastri
4. Kinnari Pandya
5. Shipra Suneja

About the editors of this volume

Jigisha Shastri is an Early Childhood Care and Education Specialist. She has conceptualised and supported private and public sector early childhood programmes across the country. She is involved in teaching, research, professional development of ECCE teachers and curriculum development for young children. She has been associated with Azim Premji Foundation and University since 2013 and has been integral in developing University teaching programmes and field intervention programmes. She has authored books for teachers, children and early childhood professionals.

Kinnari Pandya is Associate Professor at School of Education, Azim Premji University. She has contributed to several public education system improvement programmes. In Early Childhood Care and Education (ECCE), she has developed curricula and intervention programmes for several states and contributed to policy formulation through the work of Azim Premji Foundation. At the University, she teaches courses, designs and implements higher education programmes in ECCE and teacher education. Her current research interest is in understanding religious worldviews and belonging in ECCE settings, and pedagogic content knowledge of middle school teachers.

Kinnari Pandya and Jigisha Shastri together with Vrinda Datta have co-edited the book - *Teaching the Young: The Early Childhood Profession in India*, published by Orient Blackswan 2024.

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Acknowledgement

It was a pleasure to bring together the rich and diverse work being undertaken by early childhood professionals across the country in this area. We would like to express our gratitude to all authors and contributors for staying with us through the process of publishing this book.

We are thankful to Shipra Suneja for continuous conceptual inputs on the publication of the series. We thank Ira Joshi for her valuable inputs as a Guest Reviewer for the paper *Play and Early Learning Environment*. Our appreciation to Chandrika Muralidhar for careful copy-editing and Jayashree Misra, Nanit BS, Silja Bansriyar and Vidya Kamalesh for helping with the design of the book and bringing it to the present form.

We hope this book will help strengthen dialogue and shared learning among early childhood professionals moving closer towards fulfiling the vision of the Azim Premji Foundation and Azim Premji University. We hope the readers will find this significant collection useful to provide direction and further the imagination on creating quality early learning environments within their contexts.

We welcome your thoughts and feedback on the series.

The ECCE Symposium: Education for the Foundational Stage

India's richness lies in its diversity of communities, the socio-economic backgrounds, religion, caste, languages, and other such aspects. To protect the local practices in child rearing, bring in indigenous materials, simultaneously recognise the need for universal early childhood education, and provide access to quality education to all is not simple. For instance, how does one work with children who are in urban/rural areas, ensure access and equal opportunities for their growth, development? Who cares for the health, nutrition or 'quality' education for children of migrant labourers? Do these children have any rights? Thus, working with children comes with its own challenges and at multiple levels – from physical demands, behavioural, developmental issues of children to knowing the context of the child, working with a community of parents, and having limited resources. Despite these challenges, practitioners have been working with children for years now, to ensure equity and equality, access to all irrespective of their socio-economic-political background.

In India, the Government, NGOs and Private preschools have been working with children's nutrition, health, immunisation, education and other such critical areas. At the heart of their work is the child who is a part of the family system, community, culture, its context, and traditions.

The Foundational Stage of Learning

Till recently, programmes and schools for children focused on children of 3 to 6 years of age in a certain way and those beyond 6 years differently. Generally, children enter first grade at 6 years of age and therefore the early primary years were part of primary school. With the National Education Policy (NEP) 2020 and the National Curriculum Framework for Foundational Stage (NCF-FS, 2022) focus is now on learning and development of young children. The age group of 3 to 8 years has been termed as the Foundational Stage of learning. The paradigm shift is built on the growing understanding that development and learning in the first 8 years are deeply interlinked, contextualised and play based in nature. The curricular and pedagogical processes thus need to imagine children's cognitive, language, social-emotional, and physical development on a continuum of early childhood and early primary years education. Paying attention to Foundational Stage acknowledges that learning does not happen in a linear fashion and age-wise path, children do not necessarily master pre skills required for primary classes by the age of 6, therefore this period needs to provide scope for children to learn at their pace and consolidate their basic knowledge and skills by 8 years. With many children in India not having access, opportunity and equality to quality preschool up to 5 or even 6 years and considering

the developmental nature of children up to 8 years, designing a flexible foundational curriculum for 3 to 8 years from pre-primary to early primary grades becomes crucial. Such a curriculum will provide an upward continuity to learning rather than reflect a downward extension of primary classes. All of it calls for appropriate teacher development programmes that look at the Foundational Stage as an upward continuity for learning to meet the specific content and pedagogical requirements of this stage.

A lot of quality work has been happening in the Foundational Stage across India. University departments have been offering courses and programmes on early childhood areas. Academicians across India are engaged in research and programmes and theorising about young children, their learning and development. Parallelly, practitioners have been engaged in innovative and enabling practices built over the years in the Indian context. Often these practices are left undocumented and not theorised to build a critical knowledge base. These innovative practices and discourses in curriculum and pedagogy need to be discussed and documented. With the policy thrust and curricular focus for the Foundational Stage, it is time therefore to create a synergy between the work of academia and practice and build a local contextual knowledge base about early childhood domain in India.

The symposium on *Education for the Foundational Stage*

Azim Premji Foundation has been committed to working with young children for several years now through the teaching programmes offered at the Azim Premji University and its work in the field. With a clear social purpose of working towards a just, equitable, humane and sustainable society, the University is one of the Foundation's key responses to the challenges confronting the education and development sectors in India; enriching programmes for children and theorising and teaching about them. Considering this, Azim Premji University organised symposium on ***Education for the Foundational Stage*** on 9-10 February 2024.

The symposium was envisioned as a significant step in this direction of generating research and practice-based knowledge in creating a rich resource pool of literature and material in this area. Researchers, academics, practitioners working with NGOs, teachers and teacher educators from across India were invited to discuss, and disseminate, innovative ideas and experiences related to ECCE practices in curriculum and pedagogy.

The objective of the symposium was to bring people working in the area of early years education and the Foundational Stage under one roof, to share the nature, content and impact of quality/enabling practices in curriculum and pedagogy, to specifically focus on the processes of teaching and learning on a continuum in early years and early primary grades, to deliberate on how values of multilingualism, play-based contextual learning and critical thinking are being actualised in the field.

Some of the questions that guided our exploration for the two days at the symposium were,

- How do we conceptualise curricular and pedagogical processes that are play-based for the Foundational Stage?
- What are the principles of assessment to enable learning on a continuum?
- How do we draw linkages between practices in the Indian context to theoretical perspectives and global discourses in ECCE (for example, critical inquiry/inquiry-based learning/play-based learning/ Art integrated approach)
- How can curricular practices weave the diversity of children's experiences and contexts into everyday learning?

In working with children from 3 to 8 years of age, teachers need to be able to work on the curriculum and pedagogy on a continuum and build on the experiences of children based on the ideas mentioned above. Children's diverse experiences of their context, local practices, and issues of inequity related to gender, caste, class, and disability are integral to these ideas which are not exclusive in any way and are all interrelated. The two day symposium brought together 29 papers and 27 posters encompassing the following themes:

1. **Play-based pedagogy**: Practices that enable children's active engagement with things around and provide opportunities to stretch their imagination to engage with objects, people and environment. Under this sub theme, participants shared their experiences on play-based pedagogical practices.
2. **Foundational literacy and numeracy**: Basic emergent skills of reading, writing and solving mathematical problems in their everyday lives, practices that enable developing of critical abilities in children and laying the foundation for conventional reading and writing.
3. **Psychological and sociological aspects of learning**: Children's development in the different domains, integration of experiences, building safe, responsive and nurturing environments.
4. **Investigation/exploration in early years**: Curricular and pedagogy for inquiry-based learning, how children can be enabled to investigate/explore and communicate their understanding of concepts in a variety of ways.
5. **Critical thinking in children**: Practices that encourage children to critically think of their experiences and contexts, question the status quo, present viewpoints, and collaborate with others.

6. **Assessment in early years**: Nature, content, and value of assessment in early years. Observation and documentation of children and teacher experiences, and assessment.

The series on Education for the Foundational Stage

Enhancing holistic development of children, is about building on their unique strengths, interests, being inclusive and responsive to their diverse needs. It was gratifying to know that across the country the focus on individual children, growing up in their own contexts, meeting their specific needs is being practiced as clearly reflected in the range of presentations made across the various themes of the symposium. It was an opportunity to listen to the voices of the ECE fraternity, to share their success stories, their experiments, challenges, problems faced, and the solutions found. The papers represent work in ECCE from different states of India, representing children from diverse contexts-interior tribal areas, urban and rural space, work with specially challenged children; thus creating a rich pool for Indian literature.

The select papers and posters have now been conceptualised in a three part series under the following titles:

Series	Title of the Volumes	Editors
1	Education for the Foundational Stage: Play and Early Learning Environment	Jigisha Shastri Kinnari Pandya
2	Education for the Foundational Stage: Foundational Language, Literacy and Math	Ira Joshi Jigisha Shastri
3	Education for the Foundational Stage: Inquiry-based Learning and Assessment	Shipra Suneja Aruna Jyothi V Jigisha Shastri

We hope these volumes become rich resources as reference for professionals working on the ground and for those interested in understanding ECE practices in India.

Aruna Jyothi V.
Symposium Coordinator
Faculty, School of Education
Azim Premji University

A Glimpse of the Symposium: Education for the Foundational Stage

Symposium Organising Team:
Aruna Jyothi V., Ira Joshi, Jayna Jagani, Kinnari Pandya, Neha Mittal, Rishikesh BS, Shipra Suneja, Shrihari CD, Sowbhagya Varma

Introduction to the Volume: Play and Early Learning Environment

Play and Early Learning Environment is the first in the series on *Education for the Foundational Stage*. This thematic volume is a collection of articles on concepts, practices and programmes on play and early learning environment. The papers in the volume provide rich insights on what playful learning looks like in the foundational years in diverse Early Childhood settings, and illustrates the ways in which we can develop playful and inclusive learning environments for children.

The first paper on *Play and Early Learning Environment* by Shipra Suneja and Kinnari Pandya provides conceptual understanding about play, playful learning, and its significance in ECCE settings. It also provides a guiding framework to plan early learning environments and enable playful learning for young children.

This is followed by a set of three papers in the volume that discuss the concept and contours of play. The first paper by Shruti Pai presents the various concepts of playful learning; the second paper by Romila Bhatnagar highlights the power of toys in enabling playful learning, and the third paper by Wandaka Nikhla and Rima Kaur brings forth the significance of traditional games that form an integral part of curriculum in Meghalaya.

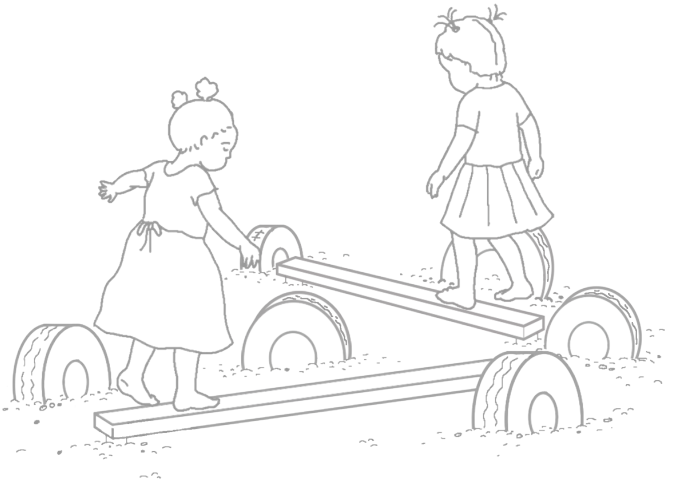
The next set of papers offer illustrations of what may constitute inclusive learning environments and how these learning environments are organised. The paper by Bhuvaneswari B and Madhusudhan R discusses considerations for creating inclusive learning environments. Manjusha Doshi and Neha Ghaneker (Tara Mobile Creches, Pune) and Shreya Sawant and Jyoti Chinta (Muktangan, Mumbai) illustrate the role of play corners, constructive play and play-based pedagogies practiced in their organisations. They offer an insight into how playful learning environments are designed and their impact on teaching learning processes. Pooja Pandit and Amrita Randhawa present the practices of Earth School elucidating the role of prepared environments in the socio-emotional development process based on Montessori method.

The last set of papers are programmatic illustrations of early learning curricula based on play-based pedagogy. Rachana Bhangaokar, Namita Bhatt and Jayana Padalia, in their paper about the Chetan Balwadi, a laboratory school (set up in The Maharaja Sayajirao University of Baroda, Baroda), present the theoretical foundations of the curriculum, and the curricular and pedagogical practices of the school. Purnima Contractor, Aloka Dutta Gupta and Jayna Jagani signify the role of music and movement as an essential element of the social environment for children that enables holistic development. Chavi Vohra and Deepshikha Singh articulate what play looks like in the curriculum for young learners designed by Mobile Creches, Delhi. Chitkalamba N unpacks the various considerations

for the large-scale implementation of play-based curriculum developed by Kalike - Tata Trusts in Anganwadi centres in Karnataka. Vidya Shukla, Manasa Ujjini C S, and Anjali Govindankutty share critical insights on play in preschool curriculum of low-cost private preschools based on Key Education Foundation's work in Bangalore. The final paper in the series by Smitin Brid presents Pratham's work on extending the practices of playful learning to home environments through a large-scale mothers' engagement programme initiated by them.

The above papers offer a glimpse of diverse practices being followed across India. We encourage our readers to engage with these ideas to create quality early learning environments for young children.

Jigisha Shastri and Kinnari Pandya



1.

Play and Early Learning Environment: A Concept Note

Shipra Suneja and Kinnari Pandya*

Abstract

Play, development and learning are deeply interconnected and interdependent experiences for children in the early years. In this paper we explore the concept of playful learning for children, explicating its characteristics such as choice, wonder and delight, and its relationship with development in the different domains. Further the paper discusses the significance of an enabling early learning environment in fostering playful learning in early years classrooms. We elaborate on this relationship between playful learning and early learning environments using certain conceptual ideas, and illustrative examples from early education settings.

Introduction

Play is synonymous with children and childhood. Children are self-explorers trying to make meaning of the world around them. Their purpose and instinctual meaning making processes are integral to play that gives it an intrinsic value. Play brings joy and delight, along with opportunities to feel, touch, experience, move, think, manipulate, imitate, talk and listen. Children's interests and ability to play as well as the contexts in which play happens are complex and diverse. The learning environment plays an important role in fostering or curbing the playful endeavours of young children.

Using playful approaches to learning is often thought of as a simple, and an obvious form of engagement when working with young children. However, educators who work with young children recognize that these are concepts with nuances, and ensuring a playful learning environment to achieve early learning goals is physically and intellectually stimulating as well as a demanding task. The value of playful learning in the overall development of the child is well established in research (Zosh et al, 2018, 2022). Over the last decade, we see an increasing acknowledgement of playful learning in curricular experiences in formal ECCE spaces as well. Key policy documents on ECCE in India, including National Education Policy (NEP) 2020, National Curriculum

**Both authors have contributed equally to the paper*

Framework 2005, National ECCE Framework 2014, Preschool curriculum 2019, National Curriculum Framework for Foundational Stage 2022 recommend playful learning as a core principle of working with young children.

With these policy emphasis and explicit curricular guidelines to offer playful learning environments and experiential pedagogy for children in the Foundational Stage, it is imperative to understand the nuances of the concepts of play and playful learning and learn from programmes that have been practicing play-based teaching-learning for young children in order to achieve the goal of enabling optimal development of young children in early years education.

This paper articulates and expands the concepts of play, playful learning, and the significance of playful learning in ECCE settings. It further elucidates the nature of early learning environments that enable playful learning.

What is playful learning?

Children engage with the world around them with curiosity. They employ their bodies and minds to engage with their environment and put to practice their slowly emerging concepts and skills to deal with new situations. They engage with their playmates and adults to take on challenging situations and construct new knowledge in the process. Playful learning supports a wide range of such experiences and is meaningful, active, engaging and context sensitive (Zosh et al, 2018). We elaborate on the concept of playful learning by looking at three integral elements - choice, wonder and delight that are part of playful behaviours (Mardell et al, 2023).

Choice is the autonomy and ownership that the child feels in taking up an action. It is a marker of intrinsic motivation that highlights agency in children (Mardell et al, 2023). In educational spaces, children's choice looks like opportunities where children could set goals by themselves, choose the material, decide on the time and take responsibility for tasks.

Wonder is to feel curiosity and a sense of amazement towards novel situations. It enables children to spend time observing things, exploring and making connections. Children also explore social roles and situations through engaging in pretend play. In educational spaces, children's wonder looks like asking questions, imagining, doing experiments, focusing attention and improvising.

Delight is a sense of excitement and satisfaction that one gets from engaging in something whether it is an activity or a conversation. Often the feeling that children experience in classrooms after finishing a task, following the instructions and receiving appreciation from teachers is relief. As opposed to relief, delight emerges from personal interest and purpose in taking up something. It is the freedom that

children engage with the things they like. In educational spaces, children's delight looks like singing a song, humming while doing an activity, prolonged participation, sharing and collaborating, anticipating, and expressing.

Box 1

Let's further reflect on the aspects of choice, wonder and delight in children's playfulness and playful learning through an illustration.

In a preschool setting, 5–6-year-olds went for a walk in the neighbourhood with paper and pencil in hand. They drew all that they saw - the big shops, the wide roofs, the table placed outside one of the shops They visited a grocery shop. They were intrigued by the spread of materials, the shelves and the balancing beam that the shopkeeper used to weigh materials. The teacher asked children if they had any questions to ask the shopkeeper. The wide-eyed children looked around and slowly started sharing their curiosity about the things in the shop- what was the weight? How much did each thing cost?, Where did these things come from, what are the things used for. Some children started sharing their own experiences of visiting the market with their parents. They looked at the work of the balancing beam with **wonder** and one by one explored it by putting material and the weighing blocks to balance the beam. The shopkeeper was bombarded with "what if" questions. "What if I put one more chocolate", "what if we had to weigh a really big table or a cat?".

Back in the classroom, one of the children asked the teacher- "why can't we have a shop in our school?" Teacher took on the idea and invited children to plan a shop in their class. Children discussed what they saw and what they would like to keep in their shop. They expressed **Choice** by determining the purpose of the shop, things they wanted to keep and how the shop would function. The teacher played a scaffolding role by giving them suggestions or challenging situations to think through - "how many jars you would need?", "Can we store milk on the shelves?", "How can we categorise items?". Children took the tasks with excitement and were keen to engage with others, pretending to be shopkeepers and customers**. Delight** was evident in the conversations and laughter that filled the classroom. As they were making currency, a group of children and teachers started singing a rhyme they had recently learnt. They were excited to take forward the idea of the shop and include more materials in the upcoming days. "The shop" stayed in the classroom for a long period and children kept going back to it, exploring new materials, building concepts knowledge and practicing the related skills.

Relationship between play, development and learning

In the early years, children develop several concepts and skills in the domains of physical, language, cognitive, social-emotional and moral. They explore their physical and social environment with sensorial experiences, talk and communicate, negotiate, and problem-solve and take up roles and responsibilities. These developmental characteristics are expressed in unique ways in children depending on their context and individual pathways of development. Often, these developmental changes are marked by active learning that young children experience in play situations. There have been several studies that have explored the relationship between play, development and learning. Studies have found that experiences that enable children to be playful lead to more nuanced meaning making (Bruner, 1990). It enables them to regulate their emotions (Vygotsky, 1986), express themselves in coherent manner (Nicolopoulou, 2005), collaborate with other (Zosh et al, 2022), and practice creativity and critical thinking (Paley, 2004; Rogers and Lapping, 2012). Playful learning and its place in ECCE curriculum have also been well established in research and policies (Wood, 2013; Saracho, 2020). Despite these qualifications, the discourse on play in learning and especially its role in actual classroom practice has been marginalised. Conventional teaching and learning have long tried to place play and learning in separate clear-cut boxes. Children engage with play naturally but if they are actively curbed from it, then playfulness is removed from learning. Learning then becomes detached, extrinsically motivated and short lived. Whereas, playful learning weaves play and learning seamlessly, acknowledging children's natural ways of engaging with their environments. Learning spaces, both physical as well as psychological, provide opportunities for children to experience choice, wonder and delight and enable playful learning.

Enabling early learning environments

What can we do to foster play and playful learning among children? What kinds of environments would enable delightful, engaging and enjoyable learning? Learning environments should be able to "speak" to children and invite them to explore and interact freely (Fraser, 2012). What we choose to include in the learning environment and how we use it with children reflects a lot about how we think about children and how we imagine they will engage with the environment. Learning environments should enable inclusivity by providing opportunities for children with diverse abilities, needs and interests to interact with other children, materials and spaces in multiple ways. How young children engage and make meaning of their surroundings should be at the centre while organizing learning environments.

Learning by the young curious learners involves exploration through play - of the natural world, social world and other objects in the environment. These explorations may be through observation, manipulation, inquiry, questioning, imitation and other ways of learning, unique to each individual child's preference. Immersing this playfulness in the environment would make learning meaningful, coherent and provide children with opportunities to collaborate, create and express their feelings.

Fraser (2012) highlights the important aspects of a playful learning environment as followed by the Reggio Emilia approach, that appropriately calls the learning environment as a third teacher. These aspects are - Aesthetics, Active learning, Collaboration, Transparency, Bringing the outdoors in, Flexibility, Relationship and Reciprocity.

Box 2

Aesthetics - Design of the learning space- how the inside and outside environments are set up. places are not too cluttered with balanced color palettes and textures.

Active learning - Creating a stimulating environment that enables exploration. Materials are open-ended and can be used for different purposes.

Collaboration - Opportunities to interact with other children and adults- build something together, share resources and listen to each other's ideas and stories.

Transparency - Both teacher and children engage in conversations about what ideas/activities can be taken up. Teacher actively seeks children's interests. Documentation is part of the classroom process and children are aware of it. They also participate in planning and review through circle time.

Bringing the outdoors in - Connecting with the outside environment. Learning spaces should be permeable. For example, going for a walk to observe trees and then coming into classrooms, drawing them and making stories about them. This also includes inviting the community into the classroom spaces whether it is a community practice, festival or a community member.

Flexibility - Being accommodating, providing time for children to take on experiences, building on children's interest

Relationship - Experiences enable the building of relationships between children and adults; these relationships are valued and respected. Also, the relationship between objects and situations are discussed and explored.

Reciprocity - The learning environment provides space for children's voices and enables exchange of ideas. It is responsive to their needs.

These core values and assumptions need to be located in the socio-cultural contexts of the child so that they offer scaffolded experiences that are authentic and enable the child to make meaningful connections. Prior and everyday experiences are seen as essential to meaning making, and the environment is able to help the learner access multiple perspectives, resources and representations (Land et al. 2012, pp.9). The visit to a local shop and bringing the shop into the formal learning space in the illustration (Box 1) both spoke to children – the shop as an element of the neighbourhood and eco-system and seeing themselves as a participant in that eco-system by creating the shop in the preschool. The environment brought these experiences to the fore- engaging with the material involved in building and running a shop, thinking about the processes and roles in the social world of the market - the shop-keeper and consumer, buying and selling, through direct exploration in play by enacting the roles, drawing the objects and using the paper-pencil to draw and share their observations, thus representing their learning through multiple modalities. An engagement that weaves wonder, choice and delight in the realm of playful learning and contributes to the holistic development of the child. These experiences expand their knowledge of the world around them, and provide opportunities to practice the skills of communicating, negotiating, appreciating, problem solving, performing, figuring social relationships and hierarchy along with mathematical skills to engage in the shop and its functioning.

The learning environment includes physical, social and temporal aspects. Let us now elaborate on these elements in some detail.

Physical aspects of the learning environment would include the physical resources and spaces. Illustratively, the size of the classroom, the extent of ventilation, open-closed spaces, the number of rooms, outdoor spaces, space to move around, seating arrangement, other facilities such as water, sanitation, library and materials – the nature and number of toys, natural material, resources - books, benches, blackboard, and crafts material. Understanding how children with diverse needs play and use materials and spaces helps us make the physical space more accessible for children.

Social aspects would include people and relationships in the learning environment. The opportunities for and the nature of interactions between teacher and children, children and children, parents and other adults contribute to children's social-emotional experience of a learning environment. Children's socio-cultural backgrounds and cultural/familial experiences are also integral to the dynamics of the social environment. To illustrate- opportunities to question, interact, share,

opine, make choices, follow instructions, collaborate, care and warmth (or neglect and abuse), security (or insecurity) that children experience through these social interactions constitute the social environments that influence learning. Both children and teachers contribute to creating a caring and inclusive learning environment. This includes children having opportunities to learn about each other - their needs and interests and take up roles to support or seek support when needed.

Temporal environment constitutes the space and time where learning occurs. The layout of the classroom, the time of the day, the overall schedule of the day, the amount of time available for engaging in different routines and experiences form the temporal environment. A few more aspects - what is the duration of the programme, how many kinds of experiences are available, for how long, how does this change depending on the age, developmental needs and nature of experiences required for children characterize the temporal aspects of learning environments.

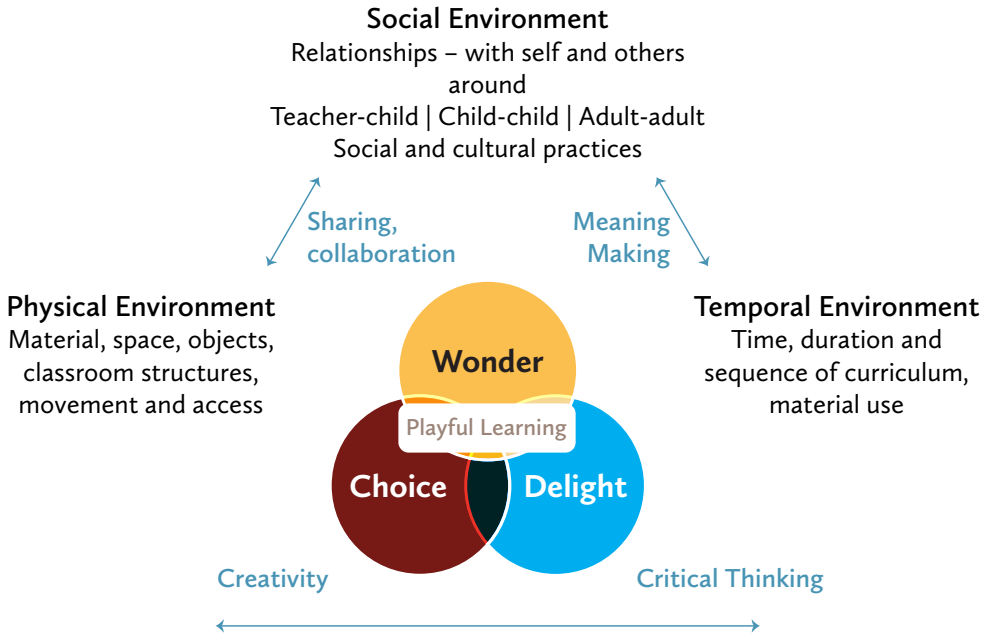


Figure 1: Components of early learning environment for ensuring playful learning in foundational years

The nature and extent of interactions across and within these elements – intra- and inter-connections between physical, social and temporal aspects of learning environments, through a carefully scaffolded learning process, would determine the

quality of playful learning experiences that are available to young children. Careful planning of these learning experiences, considering each of these constituents of playful learning environments would provide opportunity to foster choice, wonder and delight in children. Teachers' belief in the principle of play-based pedagogy, recognizing children, their ideas and characteristics and enabling active participation, creating the environment, and most importantly sustaining the early learning environment are critical to ensuring playful learning (Pandya, 2024). Such pedagogical practices potentially lead to optimal learning and development of children, a key goal of the foundational stage (NCF-FS, NCERT, 2022). Principles of learning and development such as every child is unique, children as active meaning makers, children learn through observation and interactions, explorations, and inquiry, within their lived immediate contexts, along with experiences that offer choice, wonder and delight to young learners, ought to guide the process of designing curricular engagements and preparing effective learning environments. Playful learning environments therefore become central to the education of young children.

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2.

Power of Play: Exploring Play-based Pedagogy in Early Years

Shruti S Pai

Abstract

This paper details how play and inquiry-based approaches can be integrated in an early childhood classroom to provide a stimulating environment for children. It establishes the role of a teacher as an active mentor. It discusses the importance of play in early years and presents the various philosophical perspectives guiding ECE practices in classrooms. It further elaborates various types of play, offering illustrations for pedagogical practices.

Early Childhood Education: A Context

The term Early Childhood Education (ECE) is not a novel concept in Indian education system. Although more inclined towards informal setups of education in the past, ECE has always aimed towards developing fundamentals and behavioural values along with instilling basic academic abilities in early-stage children. As is known, the first five years of a child's life are crucial for rapid learning and the development of fundamental skills. These formative years shape the most pragmatic parts of a child's personality- a child's emotions, moral values, and ability to navigate social interactions and situations. Therefore, fostering a positive environment and providing nurturing stimuli during this period is essential for laying the groundwork for future well-being.

Recognising the significance of ECE in holistic child development, recent educational policies in India, such as the National Education Policy 2020 (NEP 2020) and the National Curriculum Framework- Foundational Stage 2022 (NCF-FS, 2022), have aimed to integrate structured preschool learning initiatives that can be implemented at the grassroots. NEP 2020 articulates a very clear goal - every child in the age range of 3 - 8 years must have access to free, safe, high quality, developmentally appropriate early childhood care and education by the year 2025. To meet ends with this facet,

in 2022 the Education Ministry of India came up with a guiding policy document, NCF-FS, 2022 which particularly aims at positively transforming the school education system of India, through corresponding positive changes in the curriculum including pedagogy.

It is evident in the Indian context that children enrolled in primary grades often struggle to attain foundational skills due to limited exposure to preschool or ECE activities. Therefore, there is a pressing need to revitalise ECE practices, particularly by incorporating play-based pedagogy, which has been endorsed by eminent educators such as Maria Montessori, Friedrich Froebel, Gijubhai Badheka, and Mahatma Gandhi. These pioneers have emphasised the effectiveness of play, inquiry, and hands-on learning methods, as well as the use of stories and songs, in engaging early children and fostering their educational development.

Perspectives on early childhood education

Mahatma Gandhi: Along with advocating non-violence and peace, Gandhiji emphasised the importance of education, that in his belief, started from conception and was at prime till 5 years of age. He had an ardent belief that, *"Good education is that which draws out and stimulates the spiritual, intellectual, and physical capacities of the children. In Gandhi's scheme of education, knowledge must be related to activity and practical experience."* (Bala, 2005). Furthermore, his approach was child-centric, and he advocated that the teaching strategies should revolve around the needs of the children. Additionally, children- according to him- were curious, creative, active, and playful. Children need to be given constant practical experiences during pre-basic education in order to further strengthen the foundation of elementary or basic education.

Friedrich Froebel: Froebel is popularly known as the 'Father of Kindergarten System.' One of his key ideas was that "play is the highest expression of human development in childhood. It gives, joy, freedom, contentment, inner and outer rest, peace with the world. It holds the source of all that is good." Froebel (Froebel, 1826) acknowledged the necessity of arranging and directing play. Therefore, play—which is seen as crucial for one's own growth—special games and music that support learning, material construction, and practice with a variety of tasks were all included in his kindergarten curriculum.

Tarabai Modak: Tarabai Modak is a pioneer in introducing the Anganwadi or Balwadi system that is widely spread across the Integrated Child Development Services (ICDS) scheme currently in India. She made sure that these anganwadi/balwadi centres offered hygienic and clean environment along with being fully equipped with play and craft materials. She also opened quite a few Balwadis of her own in Maharashtra both in urban and tribal settings.

Maria Montessori: The Montessori Method as it is widely known was given to us by Maria Montessori who based her understandings and learnings on the idea that children have natural, dynamic, self-correcting forces within themselves that pave the way for learning and growth. The Montessori Method is a child-centred approach that views children as active participants in their own development. The children view their teachers as companions, nurturers, and mentors. As an instructional tool, they rely on well-designed and visually appealing surroundings.

Conclusively, all of the above chief pioneers centred 'play' and 'hands-on activities' as the central point to carry out ECE effectively. Now, let us look at the importance of Play in the ECE classroom setups, while also discussing the role of a teacher in building and nurturing such conducive environment of play and inquiry in the classroom.

Importance of play in early childhood education

What is play?

As stated above, children are active and playful beings. All children play. Very seldom do we see a group of children silently sitting in a corner. They also have their own ways of play. Play comes naturally to children, although nurturing positive environment for the same helps in their comprehensive development. Following are some examples to understand the meaning of play for children which arise from my own practices as an ECE instructor in Azim Premji School Barmer:

- Nikki*, a 4-year-old studies in class LKG. He loves playing with sand. In his free time, he is always found playing in the sand, either making something out of it or just throwing it in the air. By the end of the day, Nishant himself becomes a sand-bearer, with most of it stuck to his clothes, on his hands and inside his shoes.

- Akshita*, 5-year-old girl from UKG loves playing with paper. At every opportunity, she makes various things from paper, either by folding or colouring. She has a knack for being creative and she tries to make newer games out of paper like *tippy tippy tap.*

- A group of 4- and 5-year-olds immersed in imaginative play during free-play time where they spin their own stories with their own dialogues enacting various roles using doctor set, kitchen set, and various other play material.
  *(*Note: Names of children have been changed to maintain privacy).*

The scenarios mentioned above are some common examples of playing among small children. Moreover, no one definition or activity of playing has been pointed out by any thinkers or educationists; hence all of the above-mentioned types have its own importance.

Some scholars have defined play as the repeated response for functional pleasure, while some called it an activity that has enjoyment but nothing else as the product. Additionally, Maria Montessori called play, work of the child. With such multi-faceted characteristics of play, it can be understood as follows:

Play is natural, spontaneous, and free	**Play is fun and enjoyable**	**Play is interactive**
Play is considered to be the above if the child is engaged in an activity without any coercion and at their own free will. Furthermore, the involvement of the child should be active not passive. It's a common misconception that children do not take their play seriously, which is truly otherwise. Children play with great seriousness. They have their own rules and regulations in which they do not appreciate any interference or alternance. Children, while in this kind of play, connect their hands-on experiences with what they already know.	Play is an activity that the child finds enjoyable. This can be subjective, differing child to child. For some, the same activity can be work and for the other it can be play. For example, for some children pretend-play is easy as they correlate things and use various play material for play in group or otherwise but for some silent or individual play is better as they choose that for themselves.	Through play, children can express their ideas and gain empathy for others, which lays the groundwork for intellectual and emotional growth and stronger interpersonal bonds. This also helps in building team spirit. Examples of interactive play are when children act as shopkeepers or mimic an incident or mimic any adult in their lives; it is also playing with blocks, puzzles etc., to build something together.

Table 1: Characteristics of Play

According to NCF-FS, 2022 (p.40), "play provides active and stimulating learning opportunities to the children. The term 'play' in the context of ECCE includes all activities that are fun and engaging to the child. This can take the form of physical play, conversation, storytelling, read-aloud, shared reading, riddles, rhymes, or other enjoyable activities involving games, toys, visual art, and music." Playing in the presence of peers enhances joy and facilitates learning of new words and motor skills,

fostering social bonds and interaction among children. This interaction allows them to observe the immediate results of their actions, highlighting the social value of play. Now, let us explore the types of play suitable for early-stage children.

Types of play

While observing children, we see various kinds of play that they experience. Moreover, these different kinds of play are subject to different basis of classifications like space, content, activity, and skills. Let us understand these categories by delving into some examples from an ECE classroom of Azim Premji School Barmer:

Free and Guided Play: In Azim Premji School, Barmer, on a normal classroom day, LKG children engaged in play with blocks and puzzles, initially creating only trains and buildings. As soon as the teacher probed certain questions like, "what are the other vehicles that can be made?" or "Who stays in this building?" or "Come let's make our own buildings"; the children began to expand their imaginations. They started building homes for animals, their own homes with beds, swimming pools, etc. The probing and conscious directions guided the children towards creatively thinking about other objects that can be built with building blocks. Hence, free play enables expression and exploration in children on free will, while guided play fosters curiosity and helps them overstep their imaginations. For children, both types of play are vital. Playing freely encourages exploration while guided play aids in bringing the child's attention to a variety of topics that they might overlook when playing independently. The teacher ensures activities are enjoyable for children while guiding their play.

Picture 1:'My Home: created by Lakshita of LKG, Azim Premji School.'

Individual and Group Play: As the name suggests, Individual play occurs when a child engages alone, while group play involves playing with peers. Group play encourages adherence to rules and consideration of others' opinions. Although children play alone most of the time initially, gradual transition happens as they grow older. As

observed in various interactions with ECE children at Anganwadis and Azim Premji Schools, children start making small peer groups based on mutual interests and belongings. ECE children who like colouring and playing similar games will instantly form a group and continue the activity. They shall discuss certain measures - like what should be drawn - and come to a common consensus through deliberations so that no drawing is similar. Moreover, directional group play, led by teachers, reinforces the classroom community spirit, and enables the children to go beyond their own interests and individuality to respect others and cohabitate. Therefore, through group play, children learn the required social skills desirable for interpersonal interaction. Through solitary or individual play, a child can focus on the things tasks most interest her and improve her skills. Both individual and group play contribute to skill development and socialisation, adapting to the children's age and environment.

Picture 2: Work of children

Quiet and Physical Play: A lot of times - as practitioners - it is felt that the children, especially in early years have a lot of energy which sometimes does and does not get channelised. They typically prefer active pursuits like running and jumping over sedentary activities. Such activities where children use a lot of energy are usually called Physical Play and the ones that involve less energy, like colouring, scribbling etc., are called quiet play. Quiet Play helps children to relax and recharge their spent energies. As practitioners, it is important to recognise that children naturally have shorter attention spans and a high energy level, making prolonged periods of focus difficult. To regulate this, music helps children to engage and focus attention. When activities like drawing, scribbling (on board/floor) playing with blocks or clay or sand are combined with music or rhyme in the background, children tend to unconsciously hum with the music of the song, sometimes delving into body movements like

swaying, clapping, and tapping their feet. This not only controls their occasional impulsive behaviour, but it also helps them to indulge in a single activity, at least until the magic of the music ends.

Picture 3: A 4-year-old 'quietly' indulged in drawing out of her imagination.

The above play classifications need not be carried out in isolation. In an organic classroom set up, these types of play will surely overlap. Free play can be indoors or outdoors or playing in groups or individually can be quiet or physical. The most crucial thing is to give the child the chance to engage in all types of play, as each gives the child various horizons to inquire leading to distinct benefits.

Figure 1: A venn diagram depicting interconnectedness of various types of play.

Inquiry through play

Since birth, children are natural 'hands-on' learners, absorbing knowledge through play and exploration of their surroundings. Through inquiry in play, children discover or build their own narratives and make assumptions through their imaginations. In this kind of an approach, children become the torchbearer of their own learning, while the teacher is a mere facilitator. Using questions and cues, teachers play the role of facilitators. Children are encouraged to ask questions and use independent search techniques to discover the answers. As a result, through a process of information gathering and analysis, children learn to actively construct their knowledge base and solve problems. In one instance with the children of LKG, a discussion was being done on Air. The children had many questions, "*how do objects fly?" "how does air move things?" "can we see air?"* To understand this, we took paper airplanes outdoors. The children started flying the same and then they observed the things that were moving with the force of wind, like leaves, sand etc. The children could understand that air moved these things. Further, to infer air and space, the children took balloons and started blowing them. Some balloons were small, some balloons huge and some blew out. This made them realize that when air is blown into something, the size and space changes. A similar practice was done with blowing soap bubbles. Furthermore, the children started exploring the concept of air, inferring that they breathe air, they feel wind when they stand outdoors, their hair fly because of wind, fan is a source of air and further, air is essential for living beings. In this entire exercise, the teacher would only probe questions encouraging children to search and inquire for answers to the queries mentioned.

Play-based inquiry not only helps children in quenching their curiosities but also helps in cognitive, creative, language, motor, and psycho-social development. When children drop a few objects in water, they understand the correlation between weight and water, which further helps in cognitive development. Furthermore, when children work together, they learn to actively listen, respect and act upon each other's opinions and reactions.

Teacher: Facilitator or leader

In early years, the teacher serves as a facilitator, fostering a nurturing environment for play-based learning. This environment, enriched by collaboration with health, nutrition, and safety initiatives, empowers children to take ownership of their education and thrive. The prime role of a teacher is to build this conducive environment in which children can take ownership of their own learning and thrive as much as possible. Building positive relationships with children further enhances learning and development. When teachers involve themselves just like the children in the process of learning, the teacher-children hierarchy breaks, and the entire

classroom environment becomes 'playful.' Beyond playful activities, the 'playfulness' of the teacher is something that does wonders in a classroom. Early children usually imitate their teachers; if the teacher is cheerful, playful, sings rhymes with actions and body movements, plays with the children, gets involved with them during play time and circle time and has conversations with them about daily schedule, the children shall also follow through.

To cultivate a secure and supportive environment for learning, positive teacher - children interactions, as fundamental as sitting on the floor and engaging with the children is extremely important. Self-esteem, confidence, decision-making, problem-solving and empathy comes with an environment which is rich in appropriate opportunities and discussions. A child-centered classroom is where the children lead the learning, and the teachers understand the needs and regulate the classroom process accordingly. During circle time or conversations, if a child takes time to express themselves, the teacher cannot move on from the same. They would have to facilitate the conversation towards providing opportunities to the child so that they feel included. This can be done by improvising the discussion towards topics that interest the children, carry out activities like storytelling, rhymes and role play to maintain expressive spaces, ask probing questions, and in some special cases, have outside classroom conversation with the child. The teacher can positively impact the classroom environment in a tangible manner where proper learning corners, that include music, storytelling, art, and craft are present, encouraging children to explore freely.

Additionally, teachers must remain patient and understanding when learning does not go as planned, allowing children to progress at their own pace. Each child has unique learning needs, requiring tailored approaches. For some children' lessons might have to be repeated while some would require special attention. Empathy and intentionality guides teachers towards positive outcomes and accomplishing decided goals.

Conclusion

Early childhood children thrive on meaningful learning opportunities that nurture curiosity, imagination, and expressiveness. Their innate abilities drive them to explore through physical activities, pose questions, and engage in rhythmic expression. Engaging children in play is pivotal to their development. Play fosters exploration and growth across social, emotional, physical, and linguistic domains. It's through play that children learn best, enjoying the process while focusing on tasks. When children are left open minded and encouraged to lead activities, they use their imagination to ideate meaning to the material at-hand. This playful involvement sows the seeds of creative learning and expression in a child. There are various types of plays, interconnected to

each other, that help regulating child-centred setting in the classroom. This does not only adhere to physical play, but also rhymes, language related games, drama, music, matching, sorting and so on, majorly connected to developmental domains. While play-based pedagogy is effective, inquiry-based teaching also empowers children, fostering problem-solving, critical thinking, and active participation in learning. Children observe, raise questions, and evaluate their practices at all times during the investigation process.

John Dewey once quoted, "We do not learn from experience, we learn from reflecting on the experience" (Dewey, 1916). Inquiry-based learning, from a very young age, develops the skill to reflect upon one's own actions and emotions while being involved with peers and self. To nurture such settings, it is important for the teacher to take up the role of a facilitator, bring about playfulness in the demeanour and focus on play and inquiry as the central quotient in the pedagogical practices. Substantially, most ECE thinkers have always advocated play-based pedagogy, taking clue from which, policies- globally and nationally- have progressed in pitching play-based pedagogy as the most valued and permissible for early children. Play is a cherished and an important part of childhood. Conclusively, as the state moves towards a paradigm shift in the education where ECE is being emphasised as an essential part of the formal education, it must be ensured that ECE classrooms are full of opportunities for children to engage in play-based inquiry or inquiry-based play, strengthening their overall development in the early years.

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3.

The Power of Learning Teaching Materials in the Foundational Years

Romila Bhatnagar

Abstract

The integration of learning and teaching materials and age-appropriate toys can significantly enhance young children's learning across the foundational stage. This paper explores the effectiveness of using playful learning techniques to engage children and foster their cognitive, linguistic, social, and emotional growth. By incorporating various developmentally appropriate educational resources into play-based activities, teachers can create an interactive learning environment that supports the holistic development of children. The paper emphasises on variety of indigenous play materials by using contextualised pedagogical practices and maintaining a continuum across the foundational stage. Through a review of existing literature and case studies, the paper highlights the positive outcomes of playful learning, such as increased motivation, improved cognitive skills such as reasoning and problem-solving skills, and enhanced creativity among children. This approach not only aligns with the age and developmental needs of children but also promotes a lifelong love for learning.

Introduction

The early years, specifically the first 8 years, is a critical period for cognitive, linguistic, motor, social, and emotional development. During these foundational years, children truly enjoy and benefit from learning experiences that are engaging, interactive, enjoyable and just meant for their age and development. Traditional ways of teaching and learning include only instructions that often fall short in capturing the attention and interest of young children. NEP 2020 and NCF-FS, 2022 emphasises on play, activity and toy-based pedagogy. This makes all the practitioners aware of using and incorporating playful learning techniques into the foundational stage curriculum, i.e., extending these to classes 1 and 2. The study 'Early Childhood Care and Education in India' discusses the state of early childhood education in India, emphasising the

importance of playful learning and the use of indigenous materials to enhance educational outcomes (Kaul, V., 2002). The integration of play in interest areas within model preschools, as detailed in 'situational analysis of DM schools and designing of model preschools - A (2018-19) report', underscores the significant benefits of learning-teaching materials and play-based learning. These benefits align with findings from both Indian and global research, highlighting improvements in overall development of children. Such evidence reinforces the importance of adopting play-centric pedagogies in foundational years to foster holistic development.

Other research consistently highlights the critical role of play in early childhood development. Whitebread, D., Basilio, M., Kuvalja, M., and Verma, M. (2012) underscore this in their study on the importance of play during early years. Similarly, Fisher, K. R., Hirsh-Pasek, K., Newcombe, N., and Golinkoff, R. M. (2013) emphasise the value of play and play materials in fostering geometric understanding among preschoolers. These studies show that play with objects and materials is not merely a leisure activity but a crucial component of cognitive, social, and emotional development in young children, providing them with opportunities to explore, experiment, and understand the world around them.

Play as a natural learning process

Play is inherently a natural learning process. It helps children to satisfy their innate curiosity and at the same time ignite their desire to explore their immediate environment. Unlike structured learning happening in the typical traditional classrooms, play exploring objects and learning-teaching materials (LTM) allows children to take the lead, make choices, solve their own minor conflicts/problems, communicate, and engage in activities that interest them. They create their own rules as they work in small groups, plan and decide who will become what, and how they are going to use their limited resources and LTMs. Such kind of playful learning environments with freedom to explore within set limits encourage children to ask questions, discover, experiment, and learn from their mistakes in stimulated and enabled settings where adults are available as facilitators and co-players. This approach where adults sometimes become co-players not only makes foundational learning enjoyable but also helps the practitioners to observe and know their children much better without putting any kind of pressure on the children.

LTMs helps to wire the brain and helps children to discover how things work in their own world--

"How does this material work?"

"What happens if I put these pieces together in another way?"

"What if I try to build this upwards?"

"How can I fix this material/toy if it breaks?"

"What other ways can I use this material to play?"

Children are often seen interacting with each other as they explore and share their LTMs—

- *"Let's change the rules of this game, now you become a car mechanic and I will bring my car for repair"*
- *"How can we make this doll's marriage more fun? Let's get more friends."*

"Why does this toy move when I push this button?"

Everyone knows how the magic of play and play materials work! Rather the play materials and learning are a two-way reciprocal process. According to the National Curriculum Framework for Foundational Stage (NCF-FS,2022), play is essential for the cognitive development of young children. It provides a lively and engaging environment where children can learn about the world. For example, when they build with blocks or solve puzzles, they learn about shapes, space, and how things work. This type of active learning helps their brains wire and strengthens connections in the brain, which is important for doing well in school later on as they enter in more formal classroom learning. Playing with counting beads or number blocks helps children understand numbers and they learn to count in a fun and interactive way. Sorting games with different shapes and colour counters or even coloured unit blocks can teach children indirectly about categorisation and patterns, enhancing their mathematical thinking. When children use measuring cups in a sand or water play activity, they begin to grasp concepts of volume and measurement. These playful activities not only make learning enjoyable but also lay a strong foundation for more complex mathematical skills in the future. It is vital that learning of children at the foundational stage is anchored by nurturing relationships with those around them. These relationships matter and help children feel safe and confident, curious and communicative as they explore, discover and unfold the LTMs in a playful environment.

Exploration with learning teaching materials

Developmentally appropriate learning materials are developed to match the developmental levels of children. As children express and manage their feelings

through different types of play, such as role-playing or imaginative play, they also start developing self-regulation and a sense of identity. For example, when children engage in pretend play, they perform different emotions and scenarios, which helps them to better understand their own feelings and those of others. Material like playdough, potters clay, sensory bins/trays, building blocks, story cards, mindful cards, dolls and puppets help children to channelise their energy that can be both therapeutic and educational.

Types of learning and teaching materials

In the Indian context, incorporating indigenous play materials and developmentally appropriate LTMs tailored to the local culture and contextualised environment can significantly enhance early education. It not only supports cognitive and motor development but also preserve and promote cultural heritage. The paper discusses the use of toys, games, interactive books and digital resources, art supplies and craft materials, with a focus on Indian indigenous play materials that are particularly effective in teaching foundational literacy and numeracy. You just need to ensure that classroom LTMs must be culturally relevant and meet the needs and interests of all children. As per NCF-FS, 2022, the toys and LTMs should be selected in such a manner that these are mapped with the curricular goals, competencies and the desired learning outcomes. This would eventually help the practitioners to plan and execute her classroom practices. "Jaadui Pitara, a box containing 53 LTMs, is a result of the NCF-FS, 2022 by NCERT. All LTMs have been mapped to the competencies outlined in the NCF-FS."

Educational resources and learning teaching materials

Well-chosen toys and LTMs are essential tools at the foundational stage as they combine learning with play, however, the battery-operated toys and the models can be avoided at this stage. Because at this stage sensory play is very important - children want to touch and explore everything. Therefore, the materials designed for this age group must be fun and engaging so that they learn the basic concepts related to Foundational Literacy and Numeracy (FLN), i.e., numbers, letters, shapes, and colours easily. For example, building blocks help children develop spatial awareness and problem-solving skills and also develop their motor skills. Materials like matching and visual discrimination cards, puzzles, mazes, reasoning cards etc., enhance memory and cognitive abilities. Toys and games in India often include traditional and locally made items that integrate cultural elements with educational value. These materials are crafted to support various developmental milestones in young children, including cognitive, motor, and social skills. School leaders should gather these LTMs from different parts of our country and create a LTM resource centre from where the

practitioners can choose for their children. Toys like dolls, play manipulatives are an integral part of the Indian culture and one of the best examples is Channapatna of Karnataka, and similarly others from Odisha and Andhra Pradesh where handmade wooden toys and dolls in various shapes and sizes are probably the best play materials for children.

Traditional Indian toys and games have a special place in the child-rearing practices and the early years learning.

Unlike the fancy, expensive and electronic toys sold in stores today, traditional Indian toys and games are just simple and take their inspiration from the environment. They were designed on the basis of how a child would react to them and how it would apply to real life.

If we take an example of very popular educational material like building blocks, we find that these blocks allow children to build structures and objects, which helps them understand engineering concepts and develop fine motor skills. Similarly, schools here can get variety of blocks to the foundational classrooms like big blocks, unit blocks, foam blocks, cardboard blocks, letter and number blocks, unfix and interlocking blocks and so on. In a classroom setting, children might work together to create a structure of their own choice, which not only teaches them about designing and teamwork but also encourages creativity. Traditional wooden toys from Channapatna in Karnataka, known as "Channapatna toys," are made from ivory wood and coloured with natural dyes. These toys include building blocks, stacking rings, and abacuses, toy vehicles, which help children develop FLN skills.

Teachers should provide opportunities for children to connect with nature and natural resources like clay and sand. Have you ever invited a potter to your school, allowing children to engage with clay and create their favourite toys on their own terms and imagination? Trust me, when children are given the freedom and ample resources, they will produce wonderful creations using clay or any other medium.

The abacus, for example, is a powerful tool for teaching counting and basic math in an engaging way.

Toys aligned with Indian culture and ethos should be used as pedagogical tools across all anganwadi and preschool centres and schools for all-round development of children. This Toy play pedagogy should be the essence of teaching learning especially at the foundational years of learning. Who isn't fascinated by the famous fabric and wooden puppets of Rajasthan? These enchanting puppets mesmerise everyone, from toddlers to adults. You can create similar toy puppets using fabric scraps and old clothes to teach various concepts during the foundational stage. How about adding an engaging story to bring these puppets to life?

There is yet another beautiful storyteller toy box that can be used as an interesting pedagogical practice - '*The Kavad*', it is a traditional storytelling medium from Rajasthan, India. It involves a wooden box with multiple doors, which the storyteller, or "*Kavadiya Bhatt,*" opens to reveal colourful illustrations that help narrate a story.

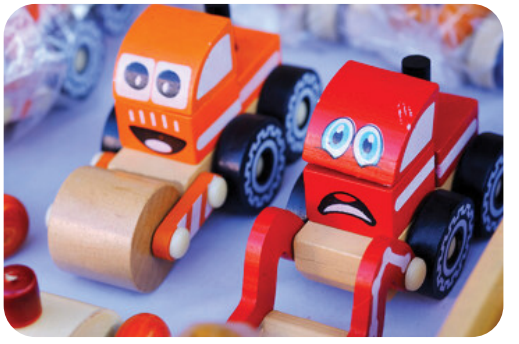
Digital resources

The tech or digital materials engage children in active learning through multimedia elements such as animations, sounds, and interactive activities. Interactive books often feature touch-and-feel elements, flaps to lift, and buttons to press, making reading a multi-sensory experience. The educational apps and online games, offer personalised learning experiences that can adapt to each child's pace and skill level. However, adults need to be careful while selecting the apps and be vigilant on-screen time, rather create a balanced schedule to use variety of LTMs. For e.g., teachers can create e-books based on popular Indian stories- "The hunter and the pigeons" on unity in diversity; "The cap-seller and the monkeys - the classic folktale" offer fun, humour as well as develop problem solving skill. The touch-and-feel elements can be added by pasting fabrics, feathers etc., and add one-to-two-line print on each page making it graded story book for each age group of the foundational stage. Digital resources like child appropriate apps provide a wide range of activities covering literacy, math, and social-emotional learning, tailored to each child's progress. Sources like e-Jaadui Pitara app of NCERT provide rhymes, stories, fun activities and games in regional languages, helping children develop FLN skills. Have you ever explored this wonderful app for our young children?

Art and craft materials

Art and craft materials foster creativity and a wonderful medium to release children's pent-up emotions and feelings. Materials like thicker crayons, coloured chalks, non-toxic paints, nature made brushes, clay etc., provide children with opportunities to explore their hands on their artistic abilities and express their thoughts and emotions using variety of papers and surfaces. Using finger paints, children can experiment with colours and textures, creating unique artworks that reflect their imaginations. Using recycled materials helps in creating collages and also teaches children about sustainability and the importance of reusing resources. Incorporating materials like "Kondapalli toys" from Andhra Pradesh, which are crafted from softwood and painted with natural dyes, can be used in thematic projects. Locally sourced materials like clay, jute, and palm leaves can be used that reflect Indian cultural motifs as well as connect them with nature.



Strategies for integrating playful learning materials in the Indian context

In the Indian context, using indigenous play materials specifically that are available locally can enhance these strategies by making learning more culturally relevant and engaging. The following are certain suggested strategies for integrating playful learning materials, including designing play-based learning activities, incorporating storytelling and role-playing using these, and utilising outdoor and physical activities, with a focus on Indian indigenous materials.

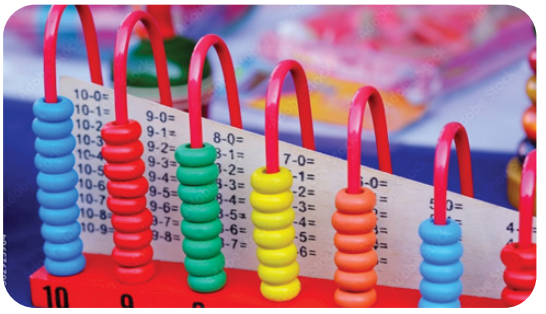
Devising play-based learning activities

Devising play-based learning activities involves creating structured yet flexible opportunities for children to explore, discover, and learn through play. In India, incorporating indigenous play materials into these activities can make learning more relatable and enjoyable for young children. For example, using traditional Indian games like "Pallanguzhi" (a mancala game popular in South India) can be an effective way to teach counting, addition, and strategy. Pallanguzhi is a traditional South Indian mancala game played on a wooden board with pits and shells or seeds. It is popular in Tamil Nadu, Kerala, and other parts of South India. The famous five

stones play develops children's fine motor and eye-hand coordination and at the same time develops concentration and attention span. Practitioners can design activities where children play Pallanguzhi to practice their math skills while also learning about cultural heritage.

Incorporating storytelling and role-playing

Storytelling and role-playing are popular for enhancing oral expression, learning new vocabulary, imagination, and social skills. Using graded and age appropriate stories and characters from Indian folklore, and local toys with the stories can make these activities more engaging and meaningful. For example, practitioners can use "Amar Chitra Katha" comic books, which are based on Indian epics, to create storytelling sessions. These stories can be adapted into role-playing activities where children take on different characters and act out scenes. As per NCF-FS(2022), story based approach not only improves FLN skills but also teaches children indirectly about moral values and cultural history. Using variety of puppets to enact stories, make learning interactive and entertaining. Can you think of certain concepts that you can map with this?



Good practices

In the rural regions of Maharashtra, the Balwadi preschool program has successfully integrated playful learning into their curriculum. Practitioners use local materials like clay, leaves, twigs and sticks to create games that teach counting, basic math, and language skills. For example, children engage in storytelling sessions using puppets made from the twigs and old fabric pieces, which enhances their vocabulary and narrative skills. This approach has led to noticeable improvements in children's engagement and retention rates.

Pratham, a leading education NGO in India, has implemented playful learning techniques across various states through their "Read India" program. This initiative uses low-cost materials like flashcards, storybooks, and interactive charts to make learning more engaging for children. In a pilot project in Uttar Pradesh, playful methods such as role-playing and educational games were introduced to teach FLN skills. The results showed significant improvements in children's reading and mathematical abilities. In urban settings like Chennai, Corporation schools have adopted technology-integrated playful learning. Using tablets and smart boards, teachers incorporate educational apps and games that make learning interactive and fun. For example, children use drawing apps to learn shapes and colours, and math games to practice math. This approach has not only increased attendance but also enhanced children's enthusiasm for learning.

Challenges and strategies

Despite the benefits of using LTMs in playful learning, there are challenges in its implementation. Here's how these challenges can be addressed:

Resource Constraints: Many schools face resource constraints when it comes to arranging for appropriate LTMs and aligning them with playful learning activities. However, teachers can overcome this challenge by being creative with the resources

they have. For example, they can create their own LTMs out of recycled materials and repurpose everyday materials. Practitioners can also use free educational apps (check the authenticity always) and online resources to add the flavour of technology.

Curriculum Alignment: Playful learning with LTMs should be aligned with curricular goals (CGs), competencies and learning outcomes. Teachers can overcome this challenge by carefully planning and integrating playful activities into their developmentally appropriate curriculum.

Parental Support: Some parents may be doubtful of playful learning and rather prefer traditional rote learning and teaching methods. To overcome this challenge, practitioners can educate parents about the benefits of playful learning and involve them in the process. They can share success stories and examples of how playful learning has improved children's learning outcomes.

The benefits of such objects and materials in a playful context where the environment is inviting, non-threatening, and just perfect for the age group are manifold like it encourages children to come to school happily, get engaged with objects and materials, look forward to age appropriate problem-solving situations. develops critical thinking skills, and fosters creativity.

Way forward

Future research should focus on exploring the long-term impacts of using LTMs and toys on children's development. Studies could investigate how different types of LTMs and toys influence various aspects of early learning and development. Moreover, there is a need to develop contextualised assessment tools that can measure the usability, availability of local toys and LTMs, classroom transactional process and its benefits across the foundational stage. Training programmes for teachers should emphasise use of LTMs for teaching different concepts and skills across the foundational stage of education and provide them with practical strategies to integrate play-based learning for individualised instructions effectively.

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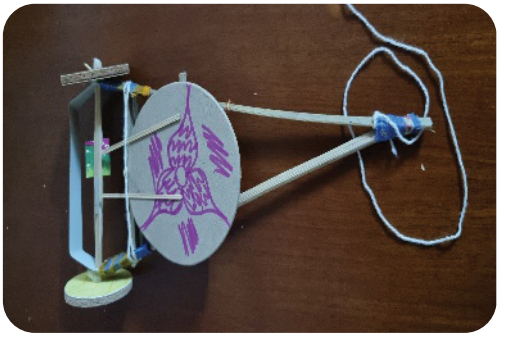


4.

Documenting Indigenous Games for the Foundational Stage in Meghalaya

Wandaka Nikhla and Rima Kaur

Abstract

Indigenous games are those played by a society for generations using only the body or with resources easily obtained from nature, offering opportunities for practices that hold significance within the culture. Our country can boast of a wealth of indigenous games historically enjoyed by many generations. Unfortunately, many of these games have faded into obscurity and are no longer familiar to today's children, who are surrounded by digital entertainment and modern technology. Indigenous games serve as a unique form of experiential learning and can be seamlessly integrated into the teaching-learning process, especially in the Foundational Stage. The documentation and preservation of indigenous games thus becomes necessary for both the present and future generations. Unfortunately, there are hardly any accessible and reader-friendly books in our country on indigenous games, particularly in a state like Meghalaya. The paper chronicles the development of a resource book on indigenous games of Meghalaya state titled *'Games Across Our Neighbourhood'* by a District Institute of Education and Training (DIET) in West Khasi Hills district of Meghalaya, DIET Nongstoin. The resource book is in Khasi language. The primary audience of this book is teachers (both pre-service and in-service), teacher educators, and parents of young children.

Why include indigenous games in the Foundational Stage?

It has been established that play-based pedagogy in the early years leads to holistic development of the physical, cognitive, language, aesthetic and cultural, and socio-emotional and ethical domains. The new National Education Policy (NEP 2020) recommends play-based pedagogy in both the Foundational and Preparatory Stages (Ministry of Education, 2020, p. 7). It emphasises the integration of sports, including

indigenous games, in all stages of schooling. It clearly articulates how such integration leads to developing a range of skills such as collaboration, responsibility, discipline and overall physical, psychological, and cognitive wellbeing (Ministry of Education, 2020, p. 12). For example, a small private school in Tanzania conducted an informal study over a five-year period to document indigenous games played by children and found that when these games were included in the school curriculum, they helped children develop their physical health, imagination, and problem-solving skills (Clements et al., 2008).

The National Curriculum Framework for Foundational Stage (NCF-FS, 2022) is a play-based curriculum framework aligned to the NEP recommendations. It recommends that curriculum in the Foundational Stage must reflect the cultural and social context in which the child is growing e.g., stories, arts, games, sports, examples, and problems, so that education is maximally relatable, relevant, interesting, and effective (NCERT, 2022, p. 46). Therefore, a strong rationale for including indigenous games in the Foundational Stage classroom is that young children develop and learn better when they are immersed in a play-based curriculum that reflects not only contemporary games which are played in school or outside, but also indigenous games which they play with their family and friends. Such pedagogy is guided by an approach known as culturally responsive teaching, an asset-based approach that uses children's cultural knowledge, prior experiences, frames of references, and performance styles (Gay, 2018, as cited in Armstrong, 2021). This makes all children coming from diverse backgrounds feel valued, and become more engaged and sensitive learners, fostering a sense of identity and belonging. The significance of this applies to both culturally diverse and homogeneous classrooms.

A common critique of including indigenous games in the school curriculum is that children already play these games outside school, and that by playing them in school too, they are being limited to their pre-existing knowledge and skills. However, these can act as a bridge to new learning (Armstrong, 2021). Also, it is entirely possible that children may ordinarily not be entirely familiar with such indigenous games or may only play them occasionally on festivals and other special occasions. This leads to another major reason for including them in the school curriculum – to revitalise, preserve, and transmit indigenous culture and heritage (Aguilera et al., 2007). Indigenous ways of learning are often de-legitimised by being formally excluded from school curriculum. Their formal inclusion acknowledges indigenous ways of learning which are aligned to the learning principles and goals of the Foundational Stage curriculum.

In order to effectively bring indigenous games into the school space, teachers need to develop competencies such as drawing on children's culture and collaborating with families and the community (Armstrong, 2021). For example, in First Nations Communities in Canada, it was seen that partnering with families and the community

helps reconstruct cultural identity, rekindle intergenerational teaching-learning processes, and improve intergenerational relationships, thus creating conditions for community development (Ball, 2004). At two early childhood education centres in New Zealand, family participation in small projects related to the environment brought in indigenous Māori perspectives of sustainability and simultaneously improved sustainability practices in the wider community as well (Duhn & Ritchie, 2014).

DIET Nongstoin, Meghalaya

District Institute of Education and Training (DIET) Nongstoin is a government teacher education institution in Meghalaya. It caters to three districts i.e., West Khasi Hills, South West Khasi Hills, and Eastern West Khasi Hills. It is established for improving the quality of teacher education at the elementary level i.e., from classes 1-8. It is the only teacher training institute in these districts and is one of 7 DIETs in the State. It imparts the two years Diploma in Elementary Education (D El Ed) course for pre-service teachers, also called student-teachers. Additionally, it is responsible for conducting various short term capacity building programmes for elementary teachers of the districts; developing teacher education curricula; conducting educational research studies and surveys; designing curricular materials; administering assessment; and planning, advising for, and meeting the overall educational needs and aspirations of the districts and the state of Meghalaya. DIET Nongstoin has 15 faculty members including the Principal, Associate Professors, and Assistant Professors. It has the capacity of enrolling 50 student-teachers every year.

Key stakeholders

The resource book *'Games Across Our Neighbourhood'* was developed in the year 2022 by 50 student-teachers enrolled for the D El Ed (second year) at DIET Nongstoin. They were supported by the DIET faculty. The primary audience of this book is teachers (both pre-service and in-service), teacher educators, and parents of young children.

Steps taken to develop the resource book – *'Games Across Our Neighbourhood'*

Sensitising student-teachers to the significance of indigenous games

Through classroom discussions, student-teachers were first sensitised to the significance of indigenous games of the region and how they have the potential to be included in the school curriculum as a rich knowledge resource. Student-teachers were subsequently asked to think about, list, and categorise the variety of indigenous

games they used to play when they were children or have seen other children playing in their childhood. They recollected how they used to feel when they played with their friends out in the street, in the playground, or at home. They also spoke about how these games helped them in a variety of ways e.g., improving observation and concentration, sharpening logical and creative thinking, building numeracy skills, promoting overall physical development, and a lot more. Overall, this exercise helped student-teachers reflect on their own state and take pride in how it has always been a rich site of indigenous games. Student-teachers also lamented the present scenario where many indigenous games are either not played anymore or even unheard of, and the many reasons for the same. A discussion was finally held on the types of games which will be relevant to the Foundational Stage. This step took about three days to complete.

Collecting and documenting indigenous games from the community

Student-teachers were grouped based on their area of residence. Along with the DIET faculty, they ventured into different neighbourhoods and gathered further information on indigenous games played there. This was done through informal conversations with children, elders, and other members of the community. Student-teachers were provided with a format to document the games to ensure uniformity in writing. The format included the name of the game, an introduction to the game, a brief description of how the game is played, detailed rules, and potential benefits of playing the game. Student-teachers were given the autonomy to write in any language of their choice – English, Khasi, or Garo. Once the data collection was complete, the games were shortlisted and a total of twenty games were finalised. The content was translated to Khasi, the common regional language for use in schools. This step took about a month to complete.

Illustrating the resource book and collecting photographs

A few student-teachers who were interested in artistry juggled the roles of content writers and illustrators. Photographs were also collected, if they were available. This step took about a month to complete.

Mapping games to learning outcomes of the foundational stage

Student-teachers and faculty mapped all the indigenous games with the learning outcomes of the Foundational Stage. This mapping effectively highlighted the potential of the games for integrated development in all the domains. This step took about one and a half months to complete.

Publishing the resource book, 'Games Across Our Neighbourhood'

After several rounds of drafting and editing, the faculty organised the final write-ups on twenty games, added a preface, set an interesting title to the resource book – *'Games Across our Neigbourhood'* – and added the acknowledgments to the entire team of student-teachers, faculty, and the community members. After the design and technical arrangements, the resource book was finally printed and published. This step took about two months to complete.

Disseminating the resource book among teachers for implementation

As *Games Across Our Neigbourhood* was published with the clear objective of being used by a variety of stakeholders i.e., teachers (both pre-service and in-service), teacher educators, and parents of young children, copies of the resource book were sent to the Meghalaya State Department of Education. The Department provided DIET Nongstoin with additional funds for further printing and dissemination among schools in West Khasi Hills district through the District Education Office. This step took about three months to complete.

Snippets from 'Games Across the Neighbourhood'

Here are a few examples of games from the Resource Book. They have been mapped to Competencies from NCF-FS. Competencies such as the following are common to all games:

- C-4.3 Interacts comfortably with other children and adults.
- C-4.4 Shows cooperative behaviour with other children.
- C-7.3 Uses appropriate tools and technology in daily life situations and for learning.
- C-9.3 Converses fluently and can hold a meaningful conversation
- C-9.4 Understands oral instructions for a complex task and gives clear oral instructions for the same to others.

All the Competencies under Positive Learning Habits can also be mapped to such games.

Shna Iing Khyndew

Jinglamphrang

Kane ka jingialehkai ban shna iing khyndew ka long kawei ka jingialehkai kaba ki khynnah nongkyndong ki sngewtynnad ban ialehkai. Ha kaba baroh ki khynnah kynthei bad shynrang ki ia shna iing khyndew barit bad ki pynwandur kumno ban shna ia ka iing kaba itynnad bad biang ki kamra nadong shadong.

Rukom ialehkai

Ha kane ka jingialehkai ki khynnah ki ia shim bynta lang katba don ki khynnah kiba kwah ban ialehkai. Ha kaba ki khynnah kiba la heh ki pyniaid bad ai kam ia ki para khynnah ba dang rit, ba kir tih khyndew bad leit kheit syntiew ban pynriam itynnad ia ka iing ba ki shna.

Hadien ynda kila dep shna ki iakop para khynnah ba ka iing jongno ka kham itynnad, kumjuh ruh ki pynlong briew da ki dieng lyngkhot ba kin ioh shong ha kine ki iing ba ki khynnah ki shna.

Kane ka jait jingialehkai ka long kaba sngewtynnad ban ialehkai kaba ngi la ialehkai naduh mynshwa bad haduh mynta ruh ki para khynnah ki dang ialehkai ha ki por janmiet ynda kila wan skul. Ka don ka por ba ki khynnah ki ialeh kai ryngkat kynthei bad shynrang ban shna iing khyndew, ki don ruh ki por ba k ia lehkai tang para shynrang ne tang para kynthei.

9

Figure 1

Shna Iing Khyndew
Let us play house

This is a game which both girls and boys love to play. It revolves around making small houses out of mud and sand and decorating them. The older boys and girls take the lead in distributing the work among all. First, holes are dug in the sand or mud to make the houses. Younger children collect flowers, twigs, weeds, and other natural materials available nearby for decoration. Children hold informal competitions to see which house is better made and more decorative. They also make different family members by making models out of twigs. This game is predominantly played in more rural areas, especially during the winter holidays or during the evenings after school hours.

Competencies:

C-12.1 Explores and plays with a variety of materials and tools to create 2D and 3D artworks in varying sizes.

C-12.4 Works collaboratively in the arts.

C-4.1 Starts recognising 'self' as an individual belonging to a family and community.

C-1.4 Practices safe use of material and simple tools.

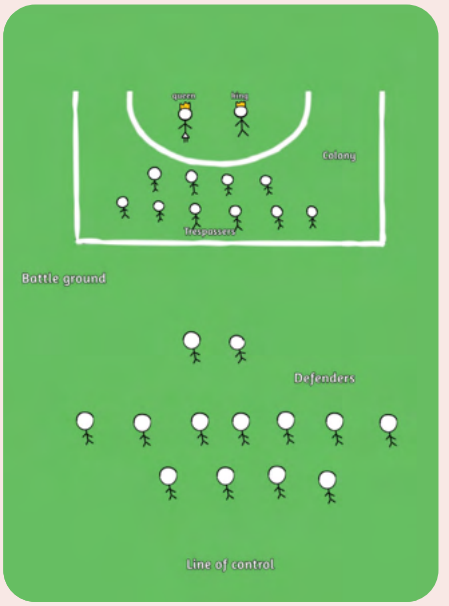


Figure 2

Ka Jinglehkai Goalda
Local football

This game is played in a playground, mostly by children who are 7-8 years old and above. Players are divided into two groups of equal size. A king and queen are appointed to count the points. A line is drawn at the centre of the ground. One player from one side tries to enter the safe zone on the opponents' side, while the opponents try to capture them. Players try to use their physical strength to escape. One by one, all players from each side must enter the safe zone on the opponents' side without being caught. Each game lasts for about 20-30 minutes. The team with more points wins the game overall.

Competencies:

C-3.2 Shows balance, coordination, and flexibility in various physical activities.

C-3.4 Shows strength and endurance in carrying, walking, and running.

C-8.3 Counts up to 99 both forwards and backwards and in groups of 10s and 20s.

C-8.10 Performs simple measurements of time in minutes, hours, day, weeks, and months.

Ia Kham

Jinglamphrang

Shaphang ka jingialehkai: ia kane ka jingialehkai la ju ia lehkai da ki khynnah kiba la nang ban kheinlang lane kiba la sngewthuh ia ka dor jong u nombar (number). La ialehkai da kaba shu kham ha ka kti ban buhrieh ia ki maw, ki marbul, ki pisa nar lane pisa kot ruh.

Kane aka jingialehkai kan iarap ia ki nongialehkai ban sngewthuh ia ki dak jingkhein bad ka dor jong ki. Ki lah ruh ban ioh ia ka jingtbit ban kheinlang da ka khlieh (mental calculation)

Rukom ialehkai:

- Donkam ban don arngut lane tam ia kata ki nongiashim bynta bad ym donkam ban phiah kynhun
- Phah ieng pyllun ia ki nongiashim bynta.
- Sam sha ki nongialehkai mar kajuh (2 haduh 10 tylli) ki maw barit lane ki marbul, ki lah ban shu kham tang da kawei ka kti.
- Phat phai lyndet shuwa (phai shabar) ha ka jylli/lain pyllun khnang ba kin ym iohi iwei ia iwei.
- Ym dei ban pyntip sha ki para nongialehkai la ki kham katno tylli.
- Haba la ia biang baroh phah ia ki ba kin phai shakhmat bad buh ruh ia ki shapdeng jong ka pyllun, ym pat dei ban plie ia ki kti.
- Phah ia ki iwei pa iwei ba kin kheinlang antad bad ong ia u nombar bad ki dei ban kynmaw ia u nombar lajong.
- Hadien ba ki la dep ong baroh, phah plied ia ki kti ba sa khein lang baroh.
- U nongiashim bynta uba la ong ia u nombar ba dei bad u nombar uba mih hadien ba la kheinlang un long u nongjop.

Figure 3

Ia Kham

Guess the no. of objects

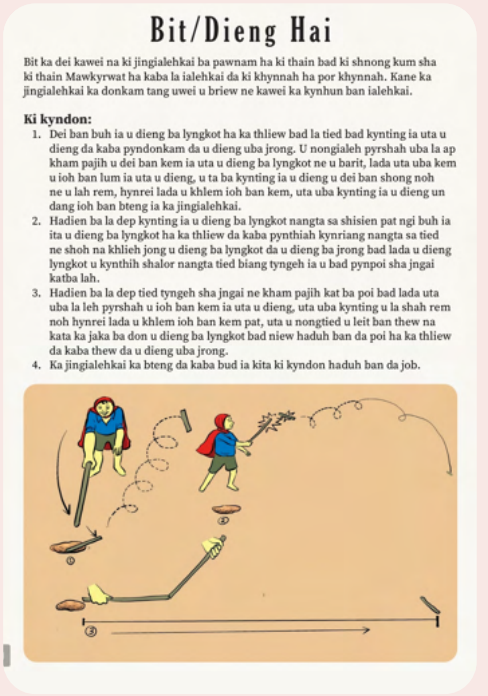
This game is typically played by children who are 6-7 years or older, since it involves numbers and addition. It has to be played by two or more players who stand and face one another. Each player picks an equal quantity of pebbles, coins, or small objects. They turn their backs to one another and conceal a few (or all) objects in their fists. They turn back and face one another. One player begins and guesses the number of items concealed in the other players' fists. If they guess rightly, the player gets the items of other player(s). The winner is the player who correctly guesses the number of items of all other players.

Competencies:

C-8.3 Counts up to 99 both forwards and backwards and in groups of 10s and 20s.

C-8.6 Performs addition and subtraction of 2-digit numbers fluently using flexible strategies of composition and decomposition.

C-8.13 Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements.



Bit/Dieng Hai

Bit ka dei kawei na ki jingialehkai ba pawnam ha ki thain bad ki shnong kum sha ki thain Mawkyrwat ha kaba la ialehkai da ki khynnah ha por khynnah. Kane ka jingialehkai ka donkam tang uwei u briew ne kawei ka kynhun ban ialehkai.

Ki kyndon:

1. Dei ban buh ia u dieng ba lyngkot ha ka thliew bad la tied bad kynting ia uta u dieng da kaba pyndonkam da u dieng uba jrong. U nongialeh pyrshah uba la ap kham pajih u dei ban kem ia uta u dieng ba lyngkot ne u barit, lada uta uba kem u ioh ban lum ia uta u dieng, u ta ba kynting ia u dieng u dei ban shong noh ne u lah rem, hynrei lada u khlem ioh ban kem, uta uba kynting ia u dieng un dang ioh ban bteng ia ka jingialehkai.
2. Hadien ba la dep kynting ia u dieng ba lyngkot nangta sa shisien pat ngi buh ia ita u dieng ba lyngkot ha ka thliew da kaba pynthiah kynriang nangta sa tied ne shoh na khlieh jong u dieng ba lyngkot da u dieng ba jrong bad lada u dieng lyngkot u kynthih shalor nangta tied biang tyngeh ia u bad pynpoi sha jngai katba lah.
3. Hadien ba la dep tied tyngeh sha jngai ne kham pajih kat ba poi bad lada uta uba la leh pyrshah u ioh ban kem ia uta u dieng, uta uba kynting u la shah rem noh hynrei lada u khlem ioh ban kem pat, uta u nongtied u leit ban thew na kata ka jaka ba don u dieng ba lyngkot bad niew haduh ban da poi ha ka thliew da kaba thew da u dieng uba jrong.
4. Ka jingialehkai ka bteng da kaba bud ia kita ki kyndon haduh ban da job.

Figure 4

Bit/Dieng Hai
Hitting the stick

This is a popular game usually played in more rural areas. To play this game, a long stick is used to strike a piece of wood about 6 inches long that is tapered at both ends and placed in a hole. The players are first divided into two teams. A hitter from one side hits the piece of wood. The opponents, positioned some distance away, must try and catch it. The hitter is declared out if an opponent catches the piece of wood. Otherwise, the game continues, and points keep getting counted. The distance between the initial hole and the fallen piece of wood is also measured using leg paces or the long stick to keep the score. The team who wins more points wins the game.

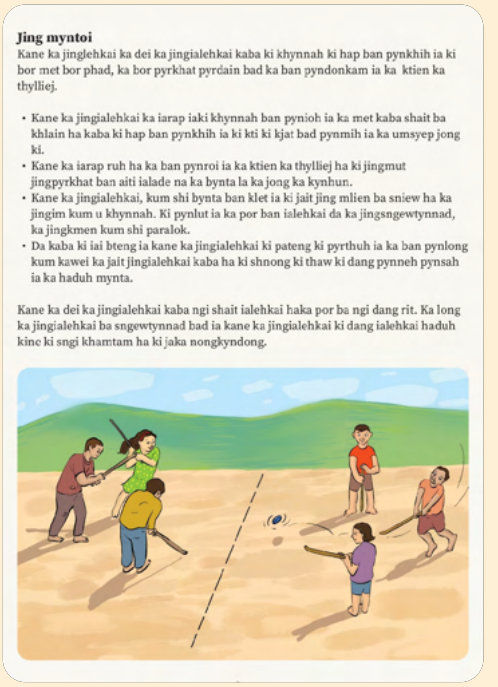
Competencies:

C-3.1 Shows coordination between sensorial perceptions and body movements in various activities.

C-3.3 Shows precision and control in working with their hands and fingers.

C-8.3 Counts up to 99 both forwards and backwards and in groups of 10s and 20s

C-8.9 Performs simple measurements of length, weight and volume of objects in their immediate environment.



Jing myntoi

Kane ka jinglehkai ka dei ka jingialehkai kaba ki khynnah ki hap ban pynkhih ia ki bor met bor phad, ka bor pyrkhat pyrdain bad ka ban pyndonkam ia ka ktien ka thylliej.

- Kane ka jingialehkai ka iarap iaki khynnah ban pynioh ia ka met kaba shait ba khlain ha kaba ki hap ban pynkhih ia ki kti ki kjat bad pynmih ia ka umsyep jong ki.
- Kane ka iarap ruh ha ka ban pynroi ia ka ktien ka thylliej ha ki jingmut jingpyrkhat ban aiti ialade na ka bynta la ka jong ka kynhun.
- Kane ka jingialehkai, kum shi bynta ban klet ia ki jait jing mlien ba sniew ha ka jingim kum u khynnah. Ki pynlut ia ka por ban ialehkai da ka jingsngewtynnad, ka jingkmen kum shi paralok.
- Da kaba ki iai bteng ia kane ka jingialehkai ki pateng ki pyrthuh ia ka ban pynlong kum kawei ka jait jingialehkai kaba ha ki shnong ki thaw ki dang pynneh pynsah ia ka haduh mynta.

Kane ka dei ka jingialehkai kaba ngi shait ialehkai haka por ba ngi dang rit. Ka long ka jingialehkai ba sngewtynnad bad ia kane ka jingialehkai ki dang ialehkai haduh kine ki sngi khamtam ha ki jaka nongkyndong.

Figure 5

Tied Pudun
Hit the object

This game is mostly played in two groups, usually in more rural areas. It is similar to hockey, but with a twist. A line is drawn at the centre of the playground, which is enclosed on all sides, and the teams are separated. A flat, round piece like a hockey puck is cut out from old rubber slippers, about 2-3 inches wide. This is the 'pudun'. The *pudun* is placed on the centre line, and the teams try and hit it towards the opponents' side using bamboo sticks. Players are confined to their side and only hit the *pudun* towards the opponents' side when it reaches their side.

Competencies:

C-3.1 Shows coordination between sensorial perceptions and body movements in various activities.

C-3.2 Shows balance, coordination, and flexibility in various physical activities.

C-3.3 Shows precision and control in working with their hands and fingers.

C-3.4 Shows strength and endurance in carrying, walking, and running.

Thoh Shithi Sha I Paralok

Jinglamphrang

Kane ka jingialehkai ka dei tang ban pyn bymia ia ki khynnah wat la kata ruh kiba la beh la san ki lah ban ia shim bynta lang. Mynta lah kham slem ngim ju iohi shuh ha dang don ban ialehkai ia kane. Ki khynnah ha kane ka jingialehkai ki ioh ban mareh bad ban ia rwai ha kajuh ka por.
Ka phang pdeng jong kane ka jingialehkai ka dei 'thoh shithi sha ki paralok' kaba mut ba kane ka jingialehkai ka dei shaphang ban phah shithi sha i paralok.

Kane ka jingialehkai kaba lah ban ialehkai lang hapoh iing bad shabar. Kane ka jingialehkai ka iarap ia ki khynnah ha ka jingsan ha ka bor pyrkhat bad ka bor met.

Kane ka jait jingialehkai lah ban ia shim bynta naduh lai ne saw ngut ki khynnah ha ka shi kymhun. Kane ka jingialehkai ka donkam ia ka jaka kaba biang bha, khnang ha ki khynnah kin lait na ka jingmynsaw. Kane ka jingkehkai kam da donkam bun jait ki tiar ialehkai, kaba donkam dei tang ka kot sada ban thoh shithi, khnang ha ki khynnah kin ioh ban ialehkai ha kano kano ka por.

Ka jingrwai:

"Thoh shithi sha i paralok, kawei la hap noh ha lynti bad mynta sah sa tang kawei te kumta mareh khei mareh khei mareh mareh mareh."

Ki kyndon:

- Ha kane ka jingialehkai ki khynnah ki ia shong lang shi jaka bad ha ka dur jong ka jylli. Kin jied uwei uba bat ia ka bol bad u dei ban ieng habor jong uto u lime ne shadien jong ki para khynnah katba kita kiba shong hapoh kin hap rwai.
- Katba kiwei ki nang rwai, uta uba bat ia ka bol un iaid suki suki nadien jong ki bad yneda ki nongrwai ki poi ha ka bynta "te kumta mareh khei" u nonghat bel um buh ia kata ka bol shadien jongno re jongno.
- Hadien ha la dep buh ia ka bol un mareh khnang ha u/ka khynnah un sngewthuh ba don ka bol bad kin ieng na ka jaka shong kin shim ia ka bol bad beh nadien jong u bad kawang da kata ka bol.
- Haba kawang da ka bol ym dei ban kawang pyrshah ne napdeng jong kiba shong ne hapoh jylli, bynrei u dei ban kawang nadien ka jylli da kaba beh bad mareh pyllon pyllon.
- Lada don mano mano ba ioh rung hapoh jylli ha ka por ha dang mareh, uta un shah weng noh na ka jingialehkai. Kamut ym dei ban rung hapoh jylli.

- Ha ka por ben ban kawang da ka bot tada u ba mareh nakhmat u ion jaka shong khlem pat dei da ka bol te uta uba bat bol hadien un hap bteng ia ka jingialehkai.

Hynrei lada uba mareh nakhmat u ioh dei da ka bol ha kawang uba nadien, uta un shah weng noh na ka jingialehkai bad ia ka jingialehkai yn bteng da ujuh u khynnah uba bat ia ka bol.

- Kane ka jingialehkai ka bteng haduh da sah satang uwei bad ita I long I nongiop.

Ia kane ka jingialehkai dei ban don 6 ngut shajrong ki nongiashim bynta. Ha ka por ialehkai ki nongrwai ba shong hapoh u lain kim dei ban peit shadien tad yneda u nonghat bel u la mareh bad ki lah ban rwad ne peit ka don ne em ka bel shadien jong ki. Ka bol hangne lah ban pyndonkam tang da kiba jem khnang ban lait na ki jingmynsaw.

Figure 6

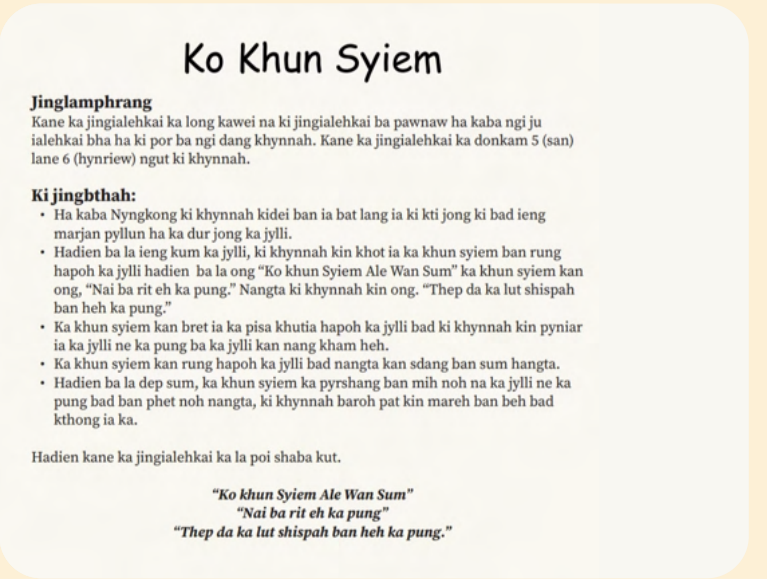
Thoh Shithi Sha I Paralok
Send a letter to my partner

This game is usually played by younger children who are 3-8 years old. It needs at least four players. Children love to play this game as it involves singing and running. Children stand in a circle and select one player who gets to hold a soft ball made by knotting a piece of cloth. As the other children sing, this player runs around the outer circle and places the ball behind any child. If that child realises that the ball is behind them, they take the ball and try and hit the player who has kept it. Meanwhile, the player tries to occupy the empty place in the circle. If the ball touches the player, they are out. The game continues with everyone getting a chance to sing and run.

Competencies:

C-9.1 Listens to and appreciates simple songs, rhymes, and poems.

C-3.1 Shows coordination between sensorial perceptions and body movements in various activities.



Ko Khun Syiem

Jinglamphrang

Kane ka jingialehkai ka long kawei na ki jingialehkai ba pawnaw ha kaba ngi ju ialehkai bha ha ki por ba ngi dang khynnah. Kane ka jingialehkai ka donkam 5 (san) lane 6 (hynriew) ngut ki khynnah.

Ki jingbthah:

- Ha kaba Nyngkong ki khynnah kidei ban ia bat lang ia ki kti jong ki bad ieng marjan pyllun ha ka dur jong ka jylli.
- Hadien ba la ieng kum ka jylli, ki khynnah kin khot ia ka khun syiem ban rung hapoh ka jylli hadien ba la ong "Ko khun Syiem Ale Wan Sum" ka khun syiem kan ong, "Nai ba rit eh ka pung." Nangta ki khynnah kin ong. "Thep da ka lut shispah ban heh ka pung."
- Ka khun syiem kan bret ia ka pisa khutia hapoh ka jylli bad ki khynnah kin pyniar ia ka jylli ne ka pung ba ka jylli kan nang kham heh.
- Ka khun syiem kan rung hapoh ka jylli bad nangta kan sdang ban sum hangta.
- Hadien ba la dep sum, ka khun syiem ka pyrshang ban mih noh na ka jylli ne ka pung bad ban phet noh nangta, ki khynnah baroh pat kin mareh ban beh bad kthong ia ka.

Hadien kane ka jingialehkai ka la poi shaba kut.

"Ko khun Syiem Ale Wan Sum"
"Nai ba rit eh ka pung"
"Thep da ka lut shispah ban heh ka pung."

Figure 7

Ko Khun Syiem
O Prince/Princess

This game is usually played by younger children who are 4-6 years old. It needs at least five players. One child is selected as the prince or princess, and the other children hold hands and form a circle. Children then start singing a song "O prince/princess" and invite the prince/princess to enter the circle. Once the prince/princess enters, the children tighten the circle and prevent them from getting out. If the prince/princess finds their way out, the children run and try to catch them.

Competencies:

C-9.1 Listens to and appreciates simple songs, rhymes, and poems.

C-3.4 Shows strength and endurance in carrying, walking, and running.

Ialeh Kai Marble (Iahdoh Mabur)

Rukom Ialehkai:

1. Donkam ar ne bun ngut ki nongialehkai.
2. Donkam ban tih thliew hajan kynroh ne ban kah da ka dieng.
3. Ban sdang iaka jingialehkai dei ban ia shim mar uwei u marble bad bret sha ka thliew.kiba lah ban pynpoi ia u marble ia u marble sha ka thliew kin ioh sdang iaka jingialehkai. Lada ki marble jong baroh ki ngam sha thliew te uta uba pynngam shwa un ioh sdang shwa. Ia kane ki ong 'iahmir'.
4. U nong sdang un sdang da kaba bret ia ki marble ba u la lum ryngkat na baroh ki nongialehkai sha thliew. Bad kiwei kin kdew ia uno u marble ban siat.
5. Ia ki marble ba la rung ha thliew un ioh uta u nongpda bad lada u dei ia kita kiba sha rud thliew da kabs siat haduh lai sien, ia kita ruh un ioh lang.
6. Ka jingsiat kan long naka jaka ba lah buh ne na u lain ba la dro.
7. Kiwei kiba don ha ka pali ba ar kin bteng lada uta uba sdang um lah ban pyndei ne siat ia ki marble bad ki ruh kumjuh kin pyrshang.
8. Ka jingialehkai kan bteng ter ter saka pali jong kiwei haduh da lut ki marble na madan.

7

Figure 8

Iadoh Mabur
Marble games

This game is mostly played in groups and is one of the most popular and enjoyable games even today. A small hole is dug in the ground near a wall. If no wall is available, the hole is guarded by a thick wooden log on one side. To begin the game, all players take one marble each and try to throw it in the hole. The player whose marble first enters the hole is called the shooter. They take the marbles of the other players and start the game by throwing all the collected marbles into the hole. Any one of the remaining players points to a marble that has not entered the hole, and the shooter gets three more chances to nudge the marble into the hole using the other marbles which are out of the hole. If the shooter is successful, they get all the marbles. The game continues till all marbles are in the hole

Competencies:

C-3.1 Shows coordination between sensorial perceptions and body movements in various activities.

C-1.4 Practices safe use of material and simple tools.

C-8.3 Counts up to 99 both forwards and backwards and in groups of 10s and 20s.

Key features of 'Games Across the Neighbourhood'

- The resource book has been co-created with the efforts of DIET faculty and student-teachers.
- It was consciously decided that the resource book will be in Khasi. This makes it easily comprehensible to all stakeholders and increases chances of its effective use for children in the Foundational Stage.
- The indigenous games in the resource book align to the learning principles and goals of the Foundational Stage curriculum, thus acknowledging indigenous ways of learning and legitimising their potential for inclusion in the school curriculum, particularly the Foundational Stage.
- Such resources are hardly available in the State for teachers (both pre-service and in-service), teacher educators, and parents, making the book a valuable resource.
- The indigenous games in the resource book also promote the use of low- or no-cost materials which can be easily obtained from nature, and which discourage staying indoors and leading a sedentary childhood – the bane of contemporary society.

Key learnings and recommendations

- Meghalaya has a wealth of indigenous games, many of which are being played by fewer and fewer people. These games are not just played in Meghalaya, but also in other States of the Northeast and even other States of the country – perhaps by different names and with variations in gameplay. Before such games vanish into obscurity, they must be collected and documented.
- More robust processes can be designed for collecting indigenous games e.g., using social media, contests/competitions, interviews with community elders, etc. This will ensure a larger pool of games which can be mapped to different stages of schooling.
- Indigenous games can be documented not only in the form of resource books, but also in the form of documentaries, comics, storybooks, activity books, board games, playing cards, etc., which can be used by children too.
- The DIETs have a significant role to play in developing such curricular materials. They are encouraged to take on such small, collaborative projects with student-teachers and the community.
- It is of utmost importance for the publication of such literature to be encouraged.
- Translations in English and Garo will help the resource book find an even wider audience.

- Collaborative research on indigenous games and other forms of indigenous knowledge must be encouraged at teacher training institutes through adequate funding.
- The development of such resources is only one part of the work. The other is to adequately disseminate the resources and ensure that all stakeholders are oriented to using them effectively for improving teaching-learning processes.

Summary

This paper highlights the significance of documenting indigenous games for the Foundational Stage, a rich and valuable resource that help children feel valued, become more engaged and sensitive learners, connect with their cultural heritage, and develop holistically in all domains. Documenting indigenous forms of knowledge such as games, stories, and songs legitimises cultural knowledge and heritage, which are largely excluded from formal school curricula. This paper also hopes to inspire faculty at teacher education institutions to co-create curricular materials that can be used by teachers (both pre-service and in-service), teacher educators, and parents. Curricular materials that can be directly used by children must also be created. More importantly, it is hoped that state education departments wholeheartedly facilitate such processes of curricular material development, including orienting in-service teachers through professional development programmes. Lastly, schools, teachers, teacher communities, and even parents are encouraged to take on the task of curricular material development.

Source for all figures (1-8): *'Games Across Our Neighbourhood',* DIET Nongstoin, Meghalaya, 2022

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5.

Environmental Considerations for Creating Inclusive Early Childhood Education Spaces

Bhuvaneswari B and Madhusudhan Ramesh

Abstract

High quality early childhood care and education lays the foundation for children's long-term development and well-being. There is a growing recognition that all children, regardless of their backgrounds or abilities, benefit from inclusive early childhood education spaces. An inclusive environment consists of indoor and outdoor spaces that are designed to support every child's participation and engagement. Consideration of the diversity of children is very important while designing early childhood education spaces. Optimal physical, temporal and socioemotional environments need to be designed to ensure access to rich early childhood experiences for all children. In instances where such environments are not designed inclusively right from the beginning, reasonable adjustments need to be made to accommodate the diverse needs of all children. This paper examines the early childhood education environments of two specific locations - Bengaluru and Aizawl, attempting to provide a nuanced understanding of how such environments influence children's experiences in diverse regional settings.

Introduction: Early Childhood Education Environment

Children actively construct their understanding of the world around them. Intentional early years educators, focus on providing young children with the tools and resources necessary for development as they explore, examine, investigate, interact, and solve problems. Early Childhood Education (ECE) spaces have a clear purpose of creating environments that offer ample opportunities for learning as well as safe risk-taking.

Children need safe, responsive and nurturing environments to develop and learn. Early Childhood Education spaces play a significant role in optimising the development of young children in various domains. Most early childhood education spaces are quite

similar in their conceptualisation of the learning environment. Despite differences in group size, number of adult caregivers and educators or the philosophy followed, the main objective of early childhood education spaces is to meet the developmental needs of all children. It is very well known that young children's needs are met through the environment. As Gordon and Browne (2010) put it, *"the environment is the sum total of the physical and human qualities that combine to create a space in which children and adults work and play together."* The physical elements provide a backdrop against which human interactions occur, thus influencing the ECE space. Human qualities add to the socio-cultural and emotional environment thus contributing to the overall dynamics of the ECE space. Thus, the environment is more than just physical space, and plays an important role in shaping children's experiences and relationships in ECE settings.

This paper delves into details of ECE settings in two Indian cities - Aizawl and Bengaluru. Bengaluru, the capital city of Karnataka in South India, and Aizawl, the capital city of Mizoram, in Northeast India differ in terms of geography, landscape, demography, language and culture. ECE spaces in both cities including Anganwadis, Private Preschools and Government Primary Schools are quite different in educational infrastructure, cultural context and the availability of resources.

The design of ECE spaces should take into account the diversity of children, considering factors such as socioeconomic backgrounds, disability and individual needs. Optimal physical, temporal and socio-emotional environment should be carefully created to ensure that every child has access to enriching high quality early childhood experiences.

For instance, the ECE settings in both Bengaluru and Aizawl have children from varied backgrounds. The diversity was quite palpable. In Bengaluru ECE spaces, one can find children speaking different languages, having varied abilities/disabilities and individual differences in terms of responding to task requirements. In Aizawl, one can also see the effects of the regional socio-political and linguistic context significantly impacting the education of young children in various ECE settings. As Mizoram shares its border with Manipur and Myanmar, the bordering areas have seen a migration of people into Mizoram due to ethnic and political conflicts. This has led to ECE spaces becoming more diverse, with children coming in from these regions. Early years teachers in Mizoram have been observed to be sympathetic towards these children, trying to create a safe and welcoming environment. While most speak in Mizo, English is seen as an aspirational language. Given the context, would early years educators adopt a more bilingual approach to teach a child who does not speak Mizo? Since political instability and conflict can have profound impact on the educational environments, would teachers in Mizoram be equipped with trauma informed pedagogical practices? How can safe learning spaces be created considering such conflict?

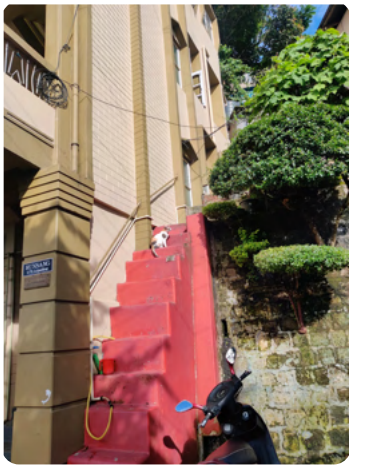
Dimensions of ECE environments

In ECE settings, the key environmental dimensions that significantly impact children's development and learning are the **physical environment,** the **temporal environment** and the **social environment**. The term physical environment refers to the overall design and layout of a given classroom and its learning centres. A well-designed physical environment enhances learning opportunities and experiences, promotes positive social interactions, and supports children's overall wellbeing.

A high-quality physical environment is the one that conveys a welcoming feeling, gives clear cues about what can be done in each area and provides varied spaces that let children concentrate, as well as lets them experience lively group interactions and vigorous physical activity (Hyson, 2008). While one needs to keep in mind the diverse needs of the children while creating high quality physical environments, the role of the larger context in determining the quality of such an environment is also essential.

Consider the case of Bengaluru and Aizawl: The landscape in Aizawl city sits at 3714 feet above sea level while Bengaluru sits at around 3000 feet above sea level. While the margins of feet above sea level between the two cities are not very high, the streets of Aizawl are very steep and curvy (as seen in pictures 1&2 below) unlike most parts of Bengaluru which relatively have flat surfaces. The implication of such a landscape means it may be a greater infrastructural difficulty and expense to ensure accessible features such as ramps in Aizawl than in Bengaluru. This may not limit the school from having accessible infrastructure but may pose difficulty to access the school. Public infrastructure may also be indicative or may have influence over the infrastructure of school spaces and through this extrapolation (and through a small group of schools that have been observed), schools were found to not have accessible features such as ramps. In light of such challenges, schools will need to invest in support mechanisms that ensure the participation of children with disabilities.

Picture 1: A steep road on a foggy day in Aizawl city



Picture 2: A steep staircase to access a house, a common sight in Aizawl city

The classrooms were also designed differently in both these cities. The classroom (with the four walls) seemed to be a significant space for organised learning in schools of Aizawl with not a lot of alternative spaces for learning other than the assembly area and school ground where organised play would take place. In most cases, classrooms had immovable or hard-to-move desks and benches with children facing the board. Except for the Anganwadis, there seems to be very little space for children to sit on the floor to do activities other than to write. While toys were seen in almost all classrooms, they were inaccessible to children or kept within the reach of teachers. Suggesting that, teachers had the say on who gets which toy at what time. In Bengaluru, we found the concept of learning stations in some ECE settings very interesting. The children alternated between the learning stations to engage with materials and activities.

The temporal environment is equally crucial in creating effective learning spaces for young children. The temporal environment of ECE settings shapes children's daily experiences and learning outcomes. It encompasses daily schedules, routines, and transitions, all of which play a significant role in providing structure, security, and predictability for young children. Predictable schedules and routines create a sense of security, help young children to learn about their world, help them to adjust to new situations, and prevent challenging behaviours.

In an ECE setting in Bengaluru, it was observed that, apart from keeping the routine predictable and offering choices to children, a visual schedule was made available, which was very helpful for children on the autism spectrum. An example of a visual schedule is shown in Picture 3.

Picture 3: (Source - 8 Types of Visual Student Schedules - The Autism Helper)

While no such special efforts were taken to aid children having difficulty in understanding routines, ECE spaces in Aizawl had well-organised routines.

In early childhood, children continue to develop self-concept and become increasingly capable of self-regulation. The ability to engage in play with their peers and conversational exchanges with the adults around them steadily develops during early childhood. Such interactions are crucial for whole-child development. A good socio-emotional environment therefore provides a solid foundation for lifelong learning and meaningful social interactions. Socioemotional or Interpersonal environment refers to the way that a classroom environment influences or supports the interactions that occur among young children, teachers, and family members. Early years educators need to develop an understanding of each child's temperament, communication preferences, strengths and areas of concerns in order to create an effective socioemotional environment. A well-designed social environment helps foster positive peer relationships, creates opportunities for meaningful interactions between adults and children, and helps the adults to support children's socioemotional development. Such an environment also provides young children with a context for play. As we know, play with or near peers is the primary engagement of children (Wong and Kasari, 2012), especially in the early years, and children learn best in an environment which allows them to explore, play and participate meaningfully.

The way play was conceptualised was quite different in Aizawl as compared to Bengaluru. While in Bengaluru, play was a means through which most learning took place, in Aizawl, play and learning were distinguished. In Aizawl, free play was the most observable form of play in the ECE settings and learning was viewed more as a formal activity. In contrast, in Bengaluru, play activities were integrated with the

concepts being taught and were used as a tool to create optimal socioemotional environments. In such a scenario, it would be interesting to note how these two contexts might respond to the emphasis on play by the NCF-FS, 2022.

ECE approaches and their imagination of environments

The environment is a fundamental aspect of all early childhood education philosophies, and it sets the stage for learning and development. Through intentional design, selection of materials and teaching methods or through social dynamics, every ECE philosophy strives to create an environment that is conducive to the holistic development of children.

In the Reggio Emilia approach, the environment plays a key role in making learning meaningful. Realising its importance, after parents and teachers, Malaguzzi considered the environment as the "third teacher" (Edwards, Gandini, & Forman, 2011). This concept of the third teacher is a flexible space that adapts to the needs of both teachers and children, enabling collaborative learning. The potential of the environment in fostering children's curiosity and creativity leads Reggio Emilia practitioners to design environments that are not only aesthetically pleasing but also reflects children's interests and experiences. The environment contributes immensely to collaborative projects and meaningful interactions between children and adults in the environment

In the Montessori method, the environment is believed to foster independence and self-directed learning. Developmentally appropriate materials are set in an orderly way to create calm and inviting spaces that have the potential to facilitate hands-on exploration and support various aspects of a child's development. The Montessori environment encourages children to follow their interests, make choices and engage purposefully with the materials in the environment. This method aims to meet the developmental needs of the whole child through experience in natural learning surroundings (Weinberg, 2011).

The Waldorf method considers the ECE environment as an extension of the home. The environment is filled with natural materials and colours that promote a feeling of security and belongingness. The indoor and outdoor spaces are designed to foster a sense of wonder and connection with nature. This philosophy believes in giving children exposure to quality materials that stimulate physical growth, language development, and curiosity (Easton, 1997).

A carefully structured environment that promotes autonomy, problem solving skills and cooperative play is the characteristic of a High/Scope environment. In this approach the ECE space is designed according to interest areas that offer a variety of materials

for exploration. ECE educators facilitate children's learning through scaffolding and meaningful social interactions. This approach emphasises that participatory learning supports child development (Schweinhart, 2006).

Regardless of the approach, early childhood education (ECE) spaces are designed to cater to children's needs and promote holistic development. These spaces must also account for the diverse needs of young children. The emphasis on including diverse learners presents challenges for teachers, especially those whose perspectives have been shaped by traditional notions of school readiness and special education for children with disabilities or learning difficulties. In any ECE space, young children with developmental delays and disabilities require sustained and systematic support to achieve optimal development and the role of the environment in fostering positive development in these children cannot be emphasised enough.

Inclusion in the early years

Inclusion in the early years promotes the development and learning of all children in a shared environment, fostering acceptance, mutual respect and a sense of belonging. Effective inclusion requires careful planning, collaboration, and ongoing support. The beginnings of such thought came from the concept of 'Least Restrictive Environment', which refers to the requirement that children with disabilities should be educated to the maximum extent appropriate with their non-disabled peers. The level of restriction should be based on the individual needs and abilities of each student. The aim of this approach was to achieve a delicate balance between promoting an inclusive educational environment and offering the specialised support that students with disabilities need in order to succeed both academically and socially.

More recently, the idea of inclusion in the early years insists on some key elements such as access, participation and support. Access refers to providing a wide range of activities and environments for every child by removing physical barriers and offering multiple ways to learn and develop; participation means using a range of instructional approaches to promote engagement in play and learning activities, and a sense of belonging for every child; and support includes scaffolding, intervention, inclusive practices, adaptations etc.

As Nutbrown, Clough and Atherton (2013) describe, "*inclusion in the early years is about practices which ensure that everyone belongs*". The aim is to meet the diverse needs of children with delays and disabilities within the classroom environment, thus reducing the need for separate interventions. Sometimes, adult-directed interventions outside the classroom, with adult-led targets, can be disorientating for children with disabilities, as generalising the skills learnt through these interventions to classroom settings may be difficult for them. Meeting the child's needs within the classroom

supports the emotional connection that every child has with their environment. By creating a safe and welcoming space where children feel heard and seen, educators can foster a sense of belonging that allows everyone to thrive.

Designing inclusive environments

When is a toy picked up and when is it rejected? This question might seem elusive (at first) because who knows what is going through their young developing minds. However, an early childhood educator who has spent enough time with the child is likely to know the answer. The reasons may broadly fit within three distinct determinants. Firstly, the toy's size, feel, and look, in other words, the sensory perception and accessibility of the said toy will contribute to its 'likeability'. Secondly, the familiarity and relationship with the toy matters. For instance, has the toy (or a similar toy) been played with by the child or their close friend? Does the toy evoke positive memories? Has the toy (or type of toy) been introduced with a sense of safety by the adult? In other words, prior engagement with the toy and the motivation (at the time) will have a bearing on whether the child decides to play with it. Thirdly, the function or purpose of the toy and whether the toy creates room to be a medium through which the child can express themselves (to the other or themselves) is a factor. In other words, what actions does the toy prompt the child to take? Lastly, and more importantly, the child may decide to play with the toy if there is a significant overlap between the three in the given time and space. These three ideas, described through the example of toys, are drawn with the use of the principles of Universal Design for Learning (UDL); a framework aimed to make all educational environments inclusive. UDL is not merely about making toys available to children, it applies to the whole curriculum, physical spaces where children play, learn or inhabit and support systems that ensure everyone has the opportunity to participate in the learning process. As a framework that draws from cognitive neuroscience, UDL is based on three principles:

- Multiple means of representation
- Multiple means of engagement
- Multiple means of action and expression

Representation refers to making available multiple means and formats through which learners can "*perceive and comprehend information in many different ways*" Meyer, Rose, & Gordon (2014, p. 478). The main idea behind 'representation' is to have a rich pool of learning materials in as many representations as possible and let children have a say in how they wish to learn. For example, learning to appreciate alphabets can happen through touch, tracing on paper, writing on sand or even observing others.

Engagement is about the route for learning. Each child will have different experiences and backgrounds about a particular topic or activity therefore this has a bearing on their interest. They may also prefer different kinds of processes in learning. Some may like a structured routine while some may like to play it by ear; Some may be quick to learn one thing but may take time with something else. Thus, in this principle, the idea is to create multiple avenues for children to become interested in learning.

Creating multiple means of engagement requires careful planning and a proactive approach. For instance, in Aizawl, the classroom activities that were observed were uniform to all children with very little differentiated work. This also means that there was very little evidence to show that there were multiple representations, engagement styles and options to express in different ways made available for children.

Action and expression are about creating multiple means to communicate learning. Some children express themselves by *doing*, while some may be highly descriptive of what they see. Some may like to express themselves in a group and some may prefer to engage one-on-one.

At its heart, UDL is about addressing variability (or diversity) in how one learns by providing many options or ways to learn so that children can discover as well as develop their own way of learning. As pointed out by Rosati (2021), UDL as a framework has strong alignment with early childhood traditions such as the Montessori. Specifically, on the fact that both ideas value children's freedom, their individual needs and emphasise on setting up the curriculum and space in accessible ways.

While frameworks such as UDL and traditions such as Montessori, Reggio Emilia provide evidence of the conditions upon which children can learn, thrive and feel included it does not necessarily suggest how or where a school or teacher could start the process of building an inclusive environment. The index for inclusion (Booth, et al. ,2002) is a resource aimed at helping schools to adopt inclusive practices in a systematic way. The index is driven by key concepts such as inclusion, identifying barriers to learning and participation, resources to support learning, participation and diversity (ibid). The index proposes looking at three interconnected dimensions as a way to develop inclusive schools, as shown in figure 1. In short, the index suggests a process of continuous improvement of policy, practice and culture of the school through a list of comprehensive indicators that serve as a self-evaluative metric upon which schools can reflect on their current state of inclusion and construct plans to make the school more inclusive. It is important to note that the index has limitations when applied to the Indian context as its conception is eurocentric and does not capture some of the more intersectional issues of disability. However, it may be thought off as a good 'starting point'.

Inclusion is explored around three interconnected dimensions of school improvements

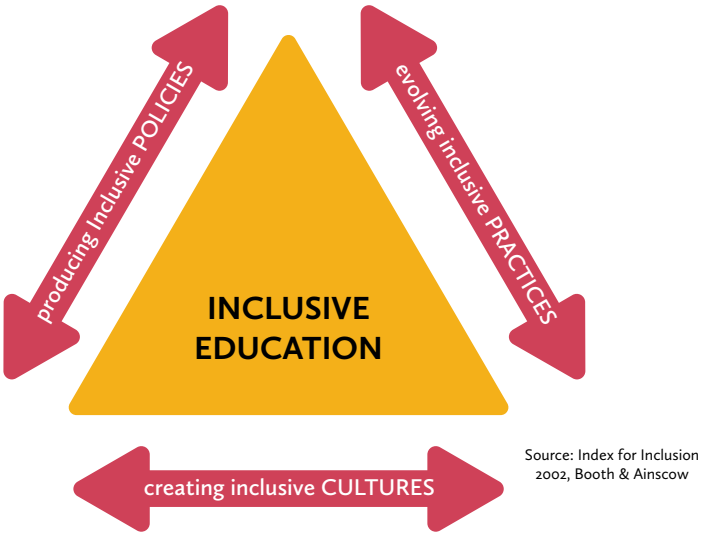


Figure 1 (Source: ibid)

Conclusion

The paper attempts to emphasise the significance of the larger context in shaping the factors influencing inclusion. The paper also highlights that creating inclusive environments is essential for the holistic development of all children, irrespective of the background or abilities. However, in instances where such environments are not initially designed with inclusivity in mind, such as using the principles of UDL, reasonable adaptations need to be made in the ECE settings to accommodate the diverse needs of all the children. Adaptations can be made to the physical, temporal as well as the socio-emotional environment of the ECE settings. Ensuring physical accessibility by installing ramps, providing specialised/adjustable furniture, and creating sensory-friendly areas will help in making the physical environment more inclusive. Establishing a predictable routine, fostering positive relationships and providing positive behavioural support will help in creating optimal temporal and socioemotional environments. The goal is to create early childhood education spaces where all children feel valued, supported, and capable of reaching their full potential.

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6.

Learning Corners as a Medium for Children's Development

Manjusha Doshi and Neha Ghanekar

Abstract

A learning corner is a designated place or physical area for specific learning purposes. For example pretend play corner, motor skills, and coordination corner, art and craft corner, home corner, sensory corner, life skills corner, math, and numeracy corner, etc.

Learning Corner is an important and powerful teaching tool. We are constantly observing a heightened engagement of children, increased self-initiation, and excitement while at the corners. The teacher can observe the child's performance without interacting with the child and can improvise her teaching.

Learning Corner prepares children for school, fosters holistic development, and nurtures young minds. It develops independence, self-initiation, and confidence. It promotes active learning, exploration, and observation. It boosts engagement, excitement, and motivation. Develops decision-making skills through choice. It enhances assignment quality and a positive learning attitude. Impresses parents with visible progress and achievements. It is unlocking children's potential through interactive learning. It encourages exploration & initiative, promotes independent learning, socialisation and inclusivity.

Context

Inter-state migration, primarily in the construction sector, remains a dynamic and continuous phenomenon. NSSO's 2011-12 Survey highlights 5.02 crore workers engaged in construction activities. Census 2011 records 4,14,22,917 inter-state migrant workers, with 79,01,819 heading to Maharashtra for work. Jan Sahas' 2020 survey reveals 54% of construction workers support three to five individuals, while 32% support more than five.

Families, mostly young couples, semi-literate with 2 to 3 children (majority below eight years of age) migrate from multiple States and move from one construction site to another site there by compromising on the child's education. Mothers are young, anaemic having early children, too many and too close i.e., without spacing. (Refer annexure 1)

Poverty and uncertainty of work impacts parents' capacity to provide daily necessities of life to their children. Children are constantly exposed to social and environmental stressors such as addictions, violence, or crime within or outside the home. Parents have less physical energy or emotional availability due to the competing demands of livelihood options

At labour colonies, children including school going are often left unattended as both parents work for daily wages. Older siblings, also children, are forced to care for their younger siblings. This lack of supervision puts children at risk of exploitation and denies them a nurturing and educational environment, potentially leading to a poor quality of life in the future.

Unfortunately, labour welfare schemes under the Building and Other Construction Workers Act (BOCWA) don't adequately address children's basic needs, such as safety, protection, and early development, despite the fact that 80% of brain development occurs during early childhood. These schemes mainly offer benefits like maternity support, education aid, medical assistance, accident relief, loans, and pensions.

Research emphasises the importance of investing in early childhood education, nutrition, and healthcare, as these yield significant social returns. Hence an effective solution is provisioning of a full-time daycare centre to unlock human potential, reduce inequality, bridge achievement gaps and lessen social disparities.

Owing to the crucial need, Tara Mobile Creches Pune (TMCP) operates daycare centres across Pune, catering to children aged from birth to 18 years at construction sites. These centres provide age-appropriate interventions in health, nutrition, and education for nurturing holistic growth and development of children. TMCP is a Not-for-Profit organisation. For more details the weblink is https://taramobilecreches.org/

Importance of early childhood education

Early childhood is a crucial phase marked by significant brain development, learning readiness, and social-emotional growth, laying the groundwork for later learning. This period is exceptionally vulnerable yet holds immense potential, necessitating adequate protection, care, and stimulation for optimal development.

Recognised globally and in India, Early Childhood Education (ECE) ensures optimal brain growth and potential realisation, supporting cognitive, social, emotional, and physical development. Neuroscience highlights the critical role of environmental factors in brain functioning, underscoring the impact of interventions like nutrition supplementation and psychosocial stimulation on overall growth and development.

Access to quality care and education beyond the home environment is vital for fostering cognitive, language, social, and emotional skills essential for school success. ECE is an investment in the future, aiding poverty alleviation and nurturing healthier, more productive citizens. By targeting socioeconomically deprived families, ECD initiatives hold promise for reducing disparities and enhancing educational efficiency, thereby offering a pathway to a brighter future.

The National Policy on Early Childhood Care and Education (2013) emphasises the importance of early care and stimulation, aiming to provide developmentally appropriate preschool education for children aged three to six, with a focus on school readiness. Research indicates that early childhood education enhances school readiness, now integral to the Sustainable Development Goals (SDGs) for 2030, particularly Target 4.2.

In India, children aged 3 to 6 years mainly access centre-based care and education through Anganwadis or private preschools. However, for children in labour colonies served by Tara Mobile Creches Pune (TMCP), daycare centres offer the sole preparation for school.

School readiness encompasses physical, social, emotional, cognitive, and language development, emphasising readiness across various domains. TMCP employs play-based learning through "Learning corners" to foster school readiness, recognising that children learn best through hands-on experiences and active participation. This approach aligns with global standards, enhancing holistic development and preparing children for formal education.

Learning Corners at Tara Mobile Creches Pune (TMCP)

Basic information

The daycare centre infrastructure is provided by the builder based on TMCP's layout design, depending on land availability and the builder's commitment. The centre is partitioned to accommodate children of different age groups: 0-3 years, 3-6 years, and 6 years and above. For 3-6 years age children, the teacher-child ratio is 1:20, an additional creche assistant is assigned when there are upto 30 children.

Learning corners are thoughtfully arranged to ensure ample space for movement, primarily indoors. Each corner is designated and labelled with large-font names and relevant pictures at child's eye level, helping children locate them easily.

Materials are provided according to the number of children, ensuring everyone gets experience and exposure. More space is allocated to corners with higher footfall based on experience.

In addition to learning corners, there is a grooming/ home corner where children can look in the mirror, apply hair oil, comb their hair, wash their face, and apply talcum powder. They use this area upon arrival or after naps. Whereas, pretend play corners are for limited time and have themes such as shops or different professions like vegetable vendors and garment sellers. Children can take a cloth bag from the grooming corner to "buy" vegetables in the pretend play corner, fostering interactive play.

Role of teacher

At the learning corners, teacher's role is crucial to ensure good participation, engagement of children, enhancing interactions among the children so the learning outcomes are good. Teachers are trained in implementing learning corners with children.

a. Planning: A monthly planner for the 3-6 age group is created for all centres, detailing thematic areas. Learning corners are planned based on the monthly theme, preparing required material in advance for the planned corners by ensuring a variety of activities regularly.

b. Setting Up: Teachers ensure corners have diverse activities and ample materials. Children assist in daily setup. Around 60-90 minutes are allotted per day to play at these corners.

c. Activity cycles: These vary, pretend play changes weekly, motor skills twice a week, art and craft daily.

d. Monitoring and Facilitating:

- *Setting Rules*: Children choose corners to play in, with simple rules reiterated daily: try different corners, request materials from peers, speak softly, and return materials after use.
- *Organising*: Teacher prevents overcrowding and encourages children to try all activities. Musical instrument sounds every 10 minutes signal children to switch corners.
- *Facilitating*: Teachers sit with children, demonstrate activities, and help tidy up afterward.
- *Intervening*: Teachers observe play, intervene as needed to resolve fights among the children.

Types and activities at learning corners

Some examples of activities in the learning corners which help in developing motor and pre-writing skills are as follows.

- Rangoli designs, chalk for floor drawing
- Magnifying glasses and small objects for observation
- Discarded sketch pens for colour identification and classification
- Flowers and leaves for garland making
- Ice cream sticks for pattern creation
- Story cards for sequential arrangement
- Bottles of varying heights for ordering
- Natural materials like flowers, leaves, and stones for floor designing
- A cardboard maze with thick thread for navigating a play vehicle

List of Play Corners considered at TMCP's daycare centres

Role - play corner		
Doll's house • Makeup corner • Cutting, chopping, peeling, and shelling vegetables and fruits • Washing clothes • Making buttermilk • Pounding • Cooking	**Pretend play corner** • Dispensary • Vegetable seller • Fruit seller • Ironing shop • Bakery • Ice-cream shop • Tea shop	• Dairy • Flower shop • Footwear shop • Saloon • Grocery shop • Tailoring shop • Garage • Toy shop

How it helps children

Trying different roles during play helps children learn how other people feel and think. When they role-play and act out scenarios, they're exploring the possibilities of their actions in the real world.

- The social aspect of play helps children build friendships and learn how to cooperate and work together. It offers opportunities for them to learn to resolve conflict (Blasi & Hurwitz 2012, Erickson 1985, Pellegrini & Smith 1998).
- Playing with others also helps children establish a sense of self. They can initiate play and make decisions, which empowers them to become confident and motivated learners.

Art and craft corner

List of variations

- Free drawing
- Colour within/ outside the picture
- Thumb printing
- Printing (vegetable, blocks, leaves, sponge, etc.)
- Pasting (paper, collage, sticks, wool, cotton, etc.)
- Drawing with crayons, wet chalk, coal
- Colouring with crayons, colour pencils, sketch pens, painting brush, or shaving brush
- Paper folding, crumpling, twisting, making paper balls
- Spray painting with a toothbrush
- Colouring stones, sticks, leaves

How it helps children

- Art and craft activities have an unlimited space for thinking and expressing without any boundaries for children to create something of their own. The whole process allows them to express their feelings or ideas the way they want to and they feel successful no matter what they make as there is no right or wrong way to create.
- Art and play exposes children to different tactile experiences. They learn about the feeling of wooden blocks, soft pushy toys, wet paint, and more.
- It reduces stress and serves as an outlet for anxiety

Motor skills and coordination

List of variations

- Beading- beads of different colours and shapes, flowers, leaves
- Making paper jewellery
- Placing things on a letter or number- placing stones, seeds, shells etc.
- Lacing, buttoning, making plates, tying and untying knots
- Folding clothes
- Scrapping bricks and baking powder
- Moving figures in the Rangoli
- Cutting paper with a pair of scissors or with hand
- Playing with dough or plasticine
- Putting lids on different types of containers
- Nesting from big to small
- Playing with sand and water- pour, fill, sift, measure
- Picking things up with tweezers
- Tweezing and removing cloth pegs

How it helps children

- Children can practice gross and fine motor skills
- Build muscle and coordination
- Grow through a variety of tactile experiences

Cognitive skills

- List of variations
- Solving puzzles
- Memory cards
- Find the way
- Finding the right key for the lock
- Making patterns
- Match the pair- same object, associative objects, match number, and objects, object with shadow, back and forth, part and whole
- Seriation- according to shapes, length, size
- Domino – numbers, pictures
- Identifying things made up of which material – cotton, metal, glass, plastic

How it helps children

- Gain literacy and language skills
- Develop problem solving
- Develop motivation and curiosity to learn
- Practice focusing on task
- Children play to practice skills, try out possibilities, revise hypotheses and discover new challenges, leading to deeper learning.
- Children develop an elementary understanding of scientific concepts as they learn how the world around them works.

Sensory stimulation

- Seeing – colours, shapes, pictures, objects, etc.
- Hearing – Musical instruments, common voices, animal sounds, vehicle sounds, etc.
- Smelling – Good and bad smell, objects, flowers
- Tasting – Names of the tastes, identifying different tastes
- Textures – experiencing different textures and their names

- Science experiences –
  - Things dissolve in water, Floating and sinking, living and non-living things
  - Observing things through magnifying glass
  - Observing things attract magnet
  - Mixtures of colours
  - Observing Sprouting, plant from seed
  - Curiosity corner

Pre math activities

- Sequencing – story cards, events in order
- Classification with one or more attributes
- Spot the difference
- Comparative concepts – Big/small, Tall/short, Long / short, inside/ outside, Up/ above, far near
- Counting
- Measuring by different means

Constructing and composing corner

- Creating decorative designs using things from nature
- Building blocks
- Making objects from connecting pieces
- Creating rangoli

Language development activities

List of variations

- Reading books
- Developing story from the story cards
- Reading pictures
- Learning letters
- Playing with dolls

How it helps children

- Children's vocabulary improves. They learn sentence building for expressing their ideas, thoughts, feelings
- Use language to talk to each other. They represent and act out stories, practicing their language and storytelling skills.
- The social aspect of play helps children build friendships and learn how to cooperate and work together.
- It offers opportunities for them to learn to resolve conflict

Insights gained through Learning Corners at TMCP

It is heartening to know the benefits of Learning corners for the children. Following are the insights which the organisation would like to share.

Establishing Learning Corners and its execution

A few years back during the training on effective early childhood education and various methods, one of the programme coordinators came to know about these learning corners from an ECE expert. Learning through playing was known to all the teachers, but a well-planned learning corner along with effective facilitation and its benefits was new to the existing childcare staff.

The programme coordinator took the initiative, gathered the required information, and thought of piloting few of the learning corners at a couple of centres. The required preparations were done and the concerned staff were oriented on how to arrange the corners and how to facilitate this activity among children for their meaningful engagement. Materials in learning corners were selected and arranged to foster involvement, independence, decision-making, and responsibility. Also, it was ensured that the material from the surroundings was given priority. This helped children in connecting/associating with it.

Observations

Children take no time to get engaged with these learning corners. A new level of energy and enthusiasm is observed among them and they are eager to reach to each corner to observe and explore the material which is kept at the learning corners. Heightened engagement of children, increased self-initiation, and excitement while at the corners are constantly seen among the children.

The language is no bar at these corners. It is easier for the staff to engage children and communicate with them as the items arranged at most of the corners were easier to identify and associate with. (Note – children with varied home languages

come to these centres owing to their parent's migration). Most of the corners are self-explanatory and children learnt by exploring the material kept at the corner and through very little help from the teacher/ facilitator. They also learn by observing other children e.g., use of Taraju (weighing scale).

Kavita (Name changed) while playing at the doll's corner, used to pamper the male doll and shout-abuse, and hit the female doll. Observing her behaviour, home visits along with a couple of meetings with the parents and neighbourhoods were held to understand the home environment. It was revealed that Kavita was ill-treated

by her parents. Appropriate guidance on the effects of good and bad parenting, a loving and caring environment at home was given to parents with a close follow-up. Initially, the parents were reluctant, but with persistent efforts soon they realised the importance of good caring and stopped abusing Kavita. Kavita is showing a happy disposition in her communication while at the centre.

Play corners provide a variety for children to choose from as per their interests, moods, and attractions. Also, it is observed that for specific activities they would team up with other children and sometimes complete the work on their own. This group learning happens naturally without much effort.

Children with different backgrounds grouped easily around the corners and enjoyed being together.

The activities are designed in such a way that children can learn without or with very little help from the teacher for example self-correcting puzzles, self-explanatory activities, etc. This way of engaging through well-established corners help the staff in preparing children for school readiness with ease. School readiness activities conducted in the class are practiced by children at Learning Corners by themselves.

Their confidence is built as they do things independently, have options to choose between different activities, and learn by observing other children. Children who were shy and fearful in mixing with other children, while speaking with teachers have shown a great positive change in their behaviour.

By giving a choice, we found greater accomplishment of assignments with high quality and a more favourable attitude toward learning. Also, some children showed assertiveness while choosing the corner and while completing the work.

This method has helped those children who showed signs of introverted behaviour. They expressed their choices, likes-dislikes, comfort, and enjoyment through these learning corners.

Parents seldom visit the centre and are overwhelmed to observe their child's performance at these corners. They get encouraged to speak with their child owing to various corners and quite often during their market visits, where children observe various sellers like vegetables, fruits, tea stalls, general store, vehicle repairers, etc. The association between the learning corners and in the real-life situation helps them to express more and feel comfortable about the various exposure. It has helped in improving parent-child communication and bonding. Mothers are seen as more engaging and interactive with children; however, fathers are also amused to see the corners at the day care centres during their visits / meetings.

A boy from West Bengal was new at the centre, it was difficult for the teachers to communicate with him as he was not able to understand Marathi/ Hindi and teacher was not able to speak Bengali. He silently used to observe the children doing the patterning activity at the learning corner. In a couple of days, he started doing patterning without anybody's help.

At the role-play corner, it is observed that when children become shopkeepers, they feel powerful. We have heard them saying, *'If you don't have money then I will not give you any groceries.'*

The teacher can observe the child's performance at the corners and can improvise her own teaching or decide on the further action which would help child to be comfortable and get engaged in learning activities.

As an NGO many a times there is a challenge in managing the resources especially with the availability of trained and skilled teachers. It is learnt that, Learning Corners are very effective where there is a less staff and students are more than the expected ratio of child to teacher.

Overall children are happy to be in the space where there are Learning Corners.

Challenges faced

'We need to think very creatively about arranging corners at the centre. When we observe children playing with different materials, we are amazed to see their creativity.'

- Care giver

'When we teach a concept/subject in class, we keep the relevant activity in the corners and children do it. By practicing it they get mastery of that concept without coaxing them to do it.'

- Programme Coordinator

- Need trained and skilled staff to work with children.
- Need little more space for creating learning corners and for the movement around it.
- Lot of time is required to develop teaching material as to have variation in the material as well as in the corners.
- The organisation will be happy to have data/studies done on status of early childhood education of children of migrant construction worker.

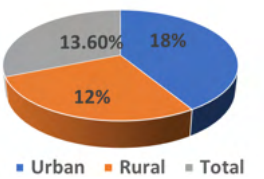
Annexure 1

Facts I: Child's growth and development

Following facts show the status of children on select key indicators owing to early childhood care and development.

According to NFHS -5 (2019-21), children age 5 years who attended pre-primary school during the school year 2019-20 is less than 15 %. Refer to graph 1 for the details. The major cause is the Covid 19 pandemic, as many of the facilities were closed due to the lockdown.

Graph 1: Children under 5 years who attended pre primary school

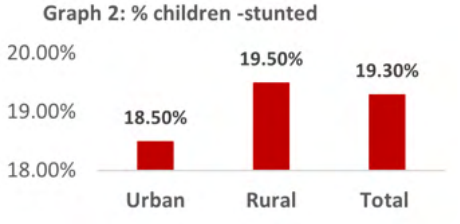


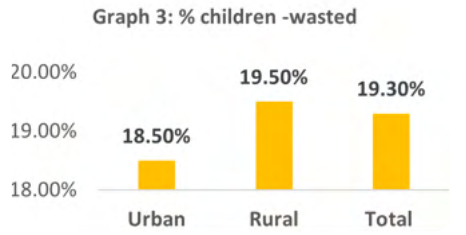
Children aged 36-59 months attending an early childhood education program is almost 50% during the time period 2021. Which means 50% of children are still out of the care and development program/ scheme. Refer table on the right.

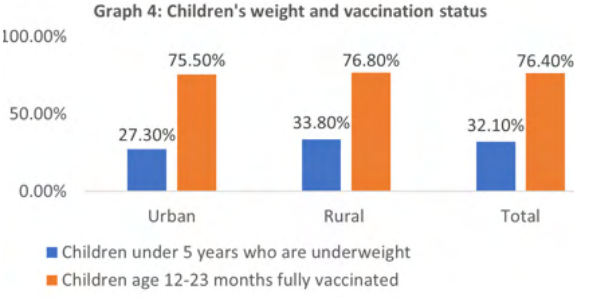
Girls	Boys	Total
50.09 %	49.16 %	49.16 %

Source:https://data.unicef.org/resources/data_explorer/unicef_f/?ag=UNICEF&df=GLOBAL_DATAFLOW&ver=1.0&dq=IND.ECD_CHLD_36-59M_EDU-PGM.&startPeriod=1970&endPeriod=2023

35.5 % of children under 5 years are stunted (height-for-age) and 19.3 % of children are wasted (weight for height) according to NFHS -5 report. Refer graphs 2 and 3. The major reason is poor nourishment of the mother, frequent illnesses and infections during the initial years of childhood, poor feeding practices and malnourishment, poor age-appropriate stimulation and opportunities for development.







32% children who are under 5 years are underweight (weight for age) and only 76% children between 12-23 months are fully vaccinated. *Source: NFHS-5*. Hence nutrition and vaccination is a concern.

Among the children of migrant construction workers, age-appropriate vaccination is a challenge as parents often misplace the 'mother and child protection' (MCP) card which has all the record right from Antenatal care up to the child's vaccination and weight.

Construction sites are in remote areas or far away from the main cities. And with frequent migration many times these children do not come in the net of nearby government health care facilities.

A research article on 'Nutritional status of under five children of migrant labourers at construction sites in Haveli Taluka, Pune, Maharashtra reveals the following facts.

Both parents leave for work for a full day posing challenges in feeding the children on time and adequately. Giving money to children seems a common practice where children opt for purchasing junk food.

Overall prevalence of Underweight	41.20%
Stunting	28.20%
Wasting	32.90%

Children with the history of eating junk food	45.90%
Children defecate in open	49.40%
Children don't wash their hands before eating	54.10%

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7. Constructive Play: A Play-Based Pedagogy

Shreya Sawant and Jyoti Chinta

Abstract

Muktangan is a not-for-profit organisation known for its work of transforming school education in underserved communities in Mumbai. This integrated model develops quality educators who foster 21st Century skills through child-friendly learning experiences. Muktangan model is based on active constructivism, where children construct their learning through developmentally appropriate experiences. A consistent daily routine eases transitions from home to school, provides a sense of security, and supports holistic development.

Constructive free play, a key component of Muktangan preschool daily routine, is conducted for an hour twice a week during the early foundational years. It allows children to explore concepts through a stimulating environment. Children use varied theme-based play materials to problem-solve, connect, and engage their curiosity.

Constructive Play involves introducing children to play spaces like Home, Art and Craft, Block, Reading-Writing, Music, Math, and Environmental Science. Children choose space and engage in child-initiated play with available materials. Teachers interact and co-play with children; they record significant observations, which are documented in a developmental log book. These observations help track each child's development, needs, and interests, informing future curricular activities. At the end of the session, children clean up and discuss their experiences, fostering active learning, logical thinking, communication, and creativity.

Introduction

The Muktangan Education Trust, more popularly known as Muktangan is a not-for-profit organisation working to transform school education with underserved communities in Mumbai and other rural urban areas in Maharashtra through outreach projects.

Our integrated model of teacher and school education develops quality educators, who facilitate the building of 21st century skills through child-friendly learning experiences. The Muktangan model is based on the philosophy of active constructivism and play-based pedagogy; where- by children construct their learning as they are provided with developmentally appropriate learning environments.

This paper attempts to share the play-based pedagogy of constructive play implemented in Muktangan's daily routine.

Review of the literature

Play-based pedagogy has emerged as an influential approach in early childhood education, this approach recognises the impact of play on children's holistic development.

Play: Definitions

J. Piaget 1962 defined play as 'the work of childhood.' Lev Vygotsky 1978 proposed that 'during play, a child is always above his average age, above his daily behaviour.' The play has been considered a "medium" for learning (Bergen, 1998) and a "condition" for learning (Fromberg, 2012).

Play-based pedagogy: Definitions

'Play-based pedagogy is an approach to early childhood education that emphasises the use of play as a central vehicle for learning and development.' (Wood E. & Attfield J. 2005). Bruce T described Play-based pedagogy as "a dynamic educational approach that acknowledges the inherent value of play in children's learning experiences through which they explore, create and holistically make sense of their world." (Bruce T. 2011)

Theoretical perspectives on play-based pedagogy

Vygotsky (1966) asserts that play spans all developmental domains, fostering a zone of proximal development that propels children forward to the next level. Emphasising its significance, he contends that play in early childhood education fosters abstract thinking and self-awareness highlighting its social and cultural dimensions. Muktangan constructive play prioritises peer and adult interactions facilitating scaffolding of children's learning supporting them to move from one level to the next.

Froebel sees play as natural learning leading to harmony (Essa, 2007), while Freud emphasises its emotional aspect (Santer et al., 2007). Children use play to resolve

emotional conflicts, like pretending to visit the dentist (Dockette & Fleer, 2003; Santer et al., 2007). Muktangan, like Frobel and Freud, values play for learning and emotional expression.

Erikson saw play as a way for children to cope with difficult experiences (Hughes, 1999), while Montessori believed it teaches them about the world and how things function (Montessori, 1965). Muktangan offers learning spaces where children can explore materials, enhancing problem-solving skills in developmentally appropriate environments.

Piaget stresses how children learn through play by exploring and connecting their prior knowledge and the real world (Alharthi et al., 2020). Bruner (1966) agrees, saying learners build new ideas based on their past experiences and social interactions (Khalifa et al., 2021). Teachers at Muktangan encourage active learning in children by guiding play, connecting it with past experiences through questions or co-playing with them.

Play and its influence on developmental domains

Cognitive: Neuroscientists have discovered that play stimulates the brain's prefrontal cortex, promoting the growth of new neurons and synapses (Gao et al., 2016).

Language: Play is beneficial for children's development in various domains predominantly in physical and language domains (Pyle, et al., 2018).

Emotional: Play reduces stress and regulates emotions by releasing stress-relieving neurotransmitters (Burghardt 2005).

Social: Rubin et al. (2013) examined how play aids in developing social skills like sharing, cooperation, communication, and perspective-taking.

Research supporting the significance of play-based pedagogy

Fozia Fatima conducted research in 2020 in Islamabad. She divided eighty students equally into control and experimental groups. The findings showed a significant relationship between both groups, suggesting that play-based activities promote meaningful learning and long-term knowledge retention. Therefore this research recommends to ensure children's interest and fun factor in learning by encouraging play-based activities that are designed for meaningful learning and long-term knowledge retention in children.

According to Kamisah and Aini's 2013 study in Malaysia, children's creativity, cognitive and social skills, and knowledge are enhanced through playtime shared with friends and supported by adults.

Davies et al. (2013), in their systematic literature review on play environment in UK proposed that play-based learning strengthens the teacher-student relationship and peer collaboration.

NEP-FS 2020 and NCF 2022: View on Play-Based Pedagogy

As articulated in NEP 2020, p. 93, "play" is central to the curriculum, pedagogy, and content. Play is vital in the foundational stage. Key elements of pedagogy at this stage include responsiveness, and opportunities for children to experiment.

NCF 2022, p. 97 emphasises toy-based pedagogy, stating that children learn best from first-hand experiences. Classrooms should foster exploration through play, using locally available toys as learning resources.

Challenges faced in implementing play-based pedagogy

Play is often perceived as merely recreational and not a valuable learning tool- (Pellegrini, A. D., & Smith, P. K. 2005).

Many educational settings still prioritise rote memorisation over recognising the value of play. These stakeholders may not fully grasp the critical role of play in fostering children's understanding of mathematical, scientific, and literacy concepts.

Teachers may lack the training and understanding to effectively integrate play into the curriculum- (Copple, C., & Bredekamp, S. 2009).

Teachers often lack the professional development focused on learning through play, leaving them ill-prepared to implement play pedagogy. Due to limited exposure to learning through play in practice, many teachers lack confidence in incorporating it into their teaching.

As we navigate the landscape of play-based pedagogy through this review, we understand there are countless advantages of implementing this pedagogy. However, there are many barriers; therefore, this paper has attempted to discuss the play-based pedagogy practices implemented by Muktangan.

Rationale and objective for constructive play

The Muktangan education model is anchored in the principles of active constructivism and play; emphasising the role of developmentally appropriate experiences in fostering children's learning. Recognising the significance of a purposefully structured

daily routine that encourages learning through play for learners, this paper aims to objectively discuss the sustainable practices of play-based pedagogy in the form of constructive play. By scrutinising how Muktangan seamlessly integrates play into their educational approach, we seek to provide a compelling examination of the effectiveness and viability of these practices.

Constructive play

What is constructive play?

Constructive Play is an organised form of play, where the child initiates and explores concepts and ideas of own interest by interacting in a pre-setup stimulating environment. Muktangan implements Constructive Play from preschool to grade 4.

Why is constructive play important?

Constructive Play is a vital component of early learning, where children utilise theme-based play materials arranged in learning spaces to problem-solve, connect, and engage their curiosity that leads to development in all domains.

Children engaged in Constructive Play promote the development of 21st century skills, preparing them to adapt to our evolving global environment. These skills include critical thinking, problem-solving, collaboration, communication, confidence, and creativity.

When do we conduct constructive play?

Constructive Play is part of the daily routine and it is conducted daily for the pre-primary and twice a week for the primary grades for 1 hour.

Teacher preparation at the beginning of the year

Creating a Constructive Play Space

For Pre-primary:

In Muktangan, the Constructive Play space is arranged within the classroom through designated theme-based play areas, known as learning areas, such as Home, Art, Block, Math, EVS, Reading-Writing, and Music. Multiple themes are incorporated to encourage children to explore materials. These spaces are clearly labelled for identification, providing room for movement and ensuring a clear separation between active and focused areas. For example, active spaces like music are positioned away from quiet areas like reading.

A minimum of 4-5 themes is suggested for children to explore materials. In shared classrooms, learning areas can be set up at the start of each session and materials can be stored afterward. In smaller classrooms, 2-3 learning areas can be arranged daily, rotating the rest throughout the week. Relevant materials are added based on seasonal changes and monthly festivities.

Planning should accommodate children with special needs. It's advisable to leave footwear outside and allow open access to materials and the space should be clean and safe.

For Primary:

Constructive Play spaces for grade 1 to 4 are set up in the subject classrooms namely; English, Social Studies, Mathematics, and Science. Each month students rotate through these classrooms.

Constructive play resources

For Pre-primary:

In Muktangan, teachers procure materials that are age and culturally suitable. These materials should be readily available in the community. Teachers ensure familiarity with all materials.

Art and Craft: crayons, old greeting cards, child friendly scissors, paint, marble paper

Home: dupatta, utensils, dolls, purses, bed

Reading and writing: newspapers, pencils, story books, clay alphabet and tracing cards

Music: egg shakers, old plate spoons, rattles, drums

Maths: ice-cream sticks, number cards, counters, number cards

Blocks: wooden blocks, plastic bricks

EVS: magnets, magnifying glasses, plants

For Primary:

Constructive Play English subject classroom: English board games, pictionary, story books

Constructive Play Mathematics Subject Classroom: weighing scales, measurement tapes, counters, tangrams

Constructive Play Social studies classroom: maps, puzzles, models of forts

Constructive Play Science classroom: test tubes, body parts models, puzzles

Picture 1: Home area

Picture2: Writing area

Teacher preparation at the beginning of every week/fortnight
Material check and replenishment:
To ensure safety, teachers conduct material check to address quality concerns such as breakage or missing items. They clean and label materials, and ensure there is enough for all children.

Constructive play: Process (preschool and primary)

Process A: Children are introduced to the constructive play spaces.

Duration: Approximately 5 - 10 minutes.

Teachers introduce children to each constructive free-play space, its materials, and acceptable conduct at the start of the year, and if new themes are added.

Process B: Children choose the play space.

Duration: Approximately 10 minutes.

The teacher and children gather in a circle to plan for free play. The teacher asks guiding questions to help children decide on activities and materials, fostering independence and responsibility. The teacher supports less engaged children and encourages exploration of new play spaces. Strategies like passing a mic or creating a "train" are used to help children share their choices. Children disperse to their chosen areas after discussing with the teacher and execute their plan.

In primary, the teacher distributes small diaries for children to write their plans. After recording their plans, the children execute them. The teacher guides by writing these sentences on the board:

- I would like to go to _____ area/corner.
- I would like to play with _____ game or materials.

Process C: Children engage in play.

Duration: Approximately 30-35 minutes.

Children proceed to their chosen area and begin playing and constructing learning as planned. Teachers extend children's play by asking open-ended questions. If children finish early, their play is extended by discussing their creations, such as drawings and models.

If some children wish to change and play in another area, they must first complete their plan in the chosen area. They then communicate their desire to play in a new area to the teacher.

Picture 3: Preschool children engaged in play

Picture 4: Primary children engaged in play

Process D: Children clear-up after play.

Duration: Approximately 10 minutes.

The teacher signals wind-up time and asks children to return all materials to their places. If a child wishes to continue playing, they are reminded of the time and encouraged to resume their play in the same area the next day.

Process E: Children discuss their play.

Duration: Approximately 10 minutes.

Children gather in small circles and are asked to show/share about their work. The work of all the children is appreciated.

Process F: Children transition to the next routine.

Duration: Approximately 2 minutes.

Children sing transition songs as it makes children aware that Constructive Play time is over and they are better prepared for the next session.

Assessment

Constructive Play significantly influences children's learning and knowledge acquisition. Muktangan employs the observation method to monitor children's development. Each day, teachers observe a group of students and document notes in a dedicated diary, allotting one page per student. Observations are dated to monitor progress and emphasize the play process and associated conversations. With parental consent, photos, audio, and video recordings may also be utilized. These records enable teachers to track development and customize curricular activities based on the needs and interests of children.

Muktangan daily routine

A consistent daily routine is crucial for young children as it facilitates smooth transitions from home to school, it helps them anticipate daily activities, provides a sense of security and supports holistic development.

Muktangan Preschool Daily Routine:

Greet and Meet: for personal socio-emotional development

Show and Tell: for promoting language development

Outdoor play: for physical, motor and sensory development

Story circle: for language, literacy, and moral development

Constructive play: for cognitive, physical motor, language, cognitive, socio-emotional and aesthetic development

Concept circle: for conceptual development

Meal circle: for physical and social development

Muktangan Primary Daily Routine:

Constructive Play sessions are held twice a week, with each month dedicated to a specific constructive play subject classroom. For instance, students in Std 1 will

participate in English constructive play class in July and Science constructive play class in August, and so forth.

Muktangan's teacher education programmes

Muktangan advocates active constructivism through play-based methods. To ensure teachers can effectively facilitate active learning, they are immersed in constructivist and play-based pedagogy during both pre-service and in-service teacher education programs. In pre-service education, Muktangan conducts sessions on setting up classroom environments, creating low-cost learning materials, Constructive Play and its process, and the teacher's role in facilitating such play, alongside other components of the Muktangan daily routine like story circles and outdoor play. During in-service training, Muktangan further strengthens these concepts through professional development sessions. Currently, Muktangan has educated 928 pre-service ECE teacher trainees and 200 in-service teachers.

Muktangan outreach teacher professional development programmes

As a knowledge partner, Muktangan collaborated with Learning Space Foundation and Govardhan Eco Village, local NGOs in resource-constrained Wada district of rural Maharashtra, to implement the Early Learners Development Programme from 2014 to 2020. Muktangan trained 38 community members to serve as supplementary teachers, guiding and sharing daily routines based on play-based pedagogy with 271 Anganwadi workers and 221 Anganwadi helpers across 9 Beats of the district.

Between 2015 and 2019, approximately 300 in-service educators from various organisations

Muktangan ECCE Toolkits:

To disseminate unique practices based on play based pedagogy, Muktangan has developed digital resources for all stakeholders of other organisations. These toolkits include handbooks and videos explaining the process, available free of cost in English, Hindi, and Marathi languages. The aim is to reach a larger audience through these resources.

Toolkit Link: https://toolkits.muktanganedu.org

Muktangan's daily routine content from the toolkits are integrated into the Maharashtra SCERT initiative known as Anandi Balshikshan. This curriculum booklet is designed for Anganwadi Sevikas in Maharashtra.

Impact

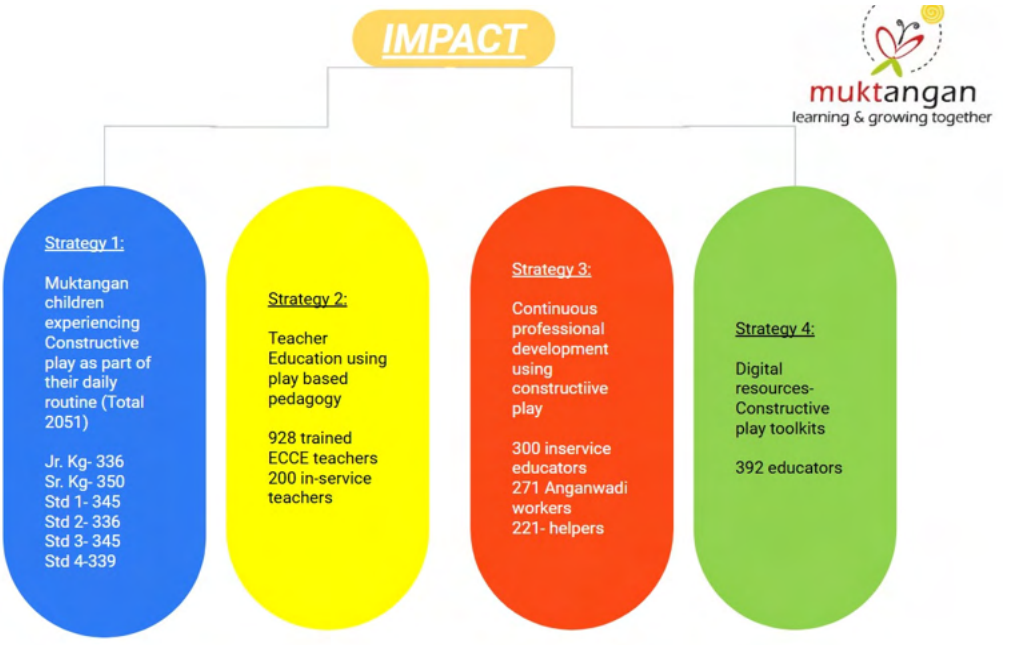

Figure 1: Impact

Since 2003, Muktangan has been integrating play-based pedagogy, specifically constructive play. In the current academic year, we are impacting a total of 2,051 children: 336 in Jr. Kg, 350 in Sr. Kg, 345 in Grade 1, 336 in Grade 2, 345 in Grade 3, and 339 in Grade 4. Muktangan has also successfully trained 928 pre-service teachers from the community and conducted in-service professional development sessions for over 200 Muktangan teachers.

Between 2015 and 2019, Muktangan organised pedagogy workshops to integrate play into classroom daily routines, impacting about 300 in-service educators. In rural Maharashtra, we empowered 271 Anganwadi workers and 221 helpers to independently deliver quality educational experiences using play-based approaches. Additionally, 392 early years practitioners accessed Muktangan's Constructive Play toolkit.

This comprehensive approach underscores our commitment to fostering quality early childhood and primary education. The workshops, capacity-building initiatives, and online resources collectively contribute to the positive and holistic learning experiences of the children we reach.

Conclusion

This paper illuminates the efficacy of play-based pedagogy, especially through unique Muktangan practices as it promotes holistic development among young learners. It draws on literature, citing Freud's emphasis on play for emotional development and problem-solving, and Piaget's observations as a framework for understanding children's physical abilities, logical reasoning, and cognitive skills that develop through active exploration and interaction with their environment.

Integrating play-based pedagogy into the classroom requires resources that create a supportive learning environment, allowing children to select materials, engage in play, and learn through the process. Wellhousen (2002) highlighted that the open-ended nature of constructive toys offers young children numerous opportunities to develop skills and abilities across various domains (Wellhousen & Kieff, 2001). To support and integrate play-based learning from preschool through grade 4, Muktangan classrooms are equipped with a diverse array of resources. Children are given the freedom to choose the materials they want to use in their play, which aids in building their understanding and learning. These resources are not solely purchased; teachers are also encouraged to gather or create affordable, low-cost materials to facilitate this pedagogy.

A 2022 research study in the USA, which explored parents' perspectives on the importance of play, found that while most parents recognise play's significance, they often prioritise academics over play in schools (Waters, 2022). Convincing all stakeholders, especially parents, is crucial for the successful implementation of play-based pedagogy. At Muktangan, we address this challenge by presenting evidence of children's developmental progress across various domains through portfolios and summary reports during Parent-Teacher Meetings (PTMs). This process aims to strengthen parental trust in play-based pedagogy and enhance parental cooperation.

In addition to involving parents, teachers play a crucial role in facilitating play-based learning. A study by Palestine (2021) found that while educators recognise the value of play-based pedagogy, many lack the necessary knowledge to effectively implement it. As a result, professional development programs for teachers are essential. Muktangan emphasises continuous professional development, extending support beyond pre-service teacher education program to include in-service years. Through regular professional development sessions, we strive to enhance teachers' skills and knowledge. We also encourage faculty members to participate in seminars and conferences, ensuring that the insights gained are shared with and benefit in-service teachers.

Play is a valuable tool for both children's learning and teachers' assessments of their development. Using play for assessment is a common practice, enabling teachers to link observations of children's development with future lesson planning (Moyles, 2012). At Muktangan, teachers observe children during play and record anecdotal notes. These observations track children's holistic development and serve as formative assessments. They help identify areas needing improvement, as well as children's interests, likes, and dislikes. This information is then used to plan future learning interventions effectively.

This paper aligns with NEP 2020 and NCF 2022, advocating for a paradigm shift in education towards integrating play-based pedagogy as a foundational element for holistic learning experiences for children.

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Full forms of abbreviations used:

CECED: Centre for Early Childhood Education and Development

AECED: Association for Early childhood education and development

SCERT: State Council of Educational Research and Training

TISS ECE: Tata Institute of Social Sciences Early childhood education

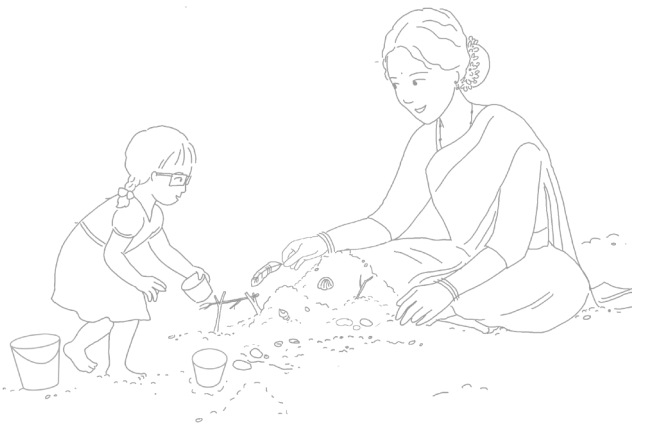
ACOTE: Active Constructive Oriented Teacher Education

NEP: National Education Policy

NCF: National Curriculum Framework

UNICEF: United Nations Children's Fund/United Nations International Children's Emergency Fun

ECE: Early Childhood Education



8.

Psychological Safety in Schools: A Montessori Perspective

Pooja Pandit and Amrita Randhawa

Abstract

Over the years, there has been a concerted effort by early childhood educators, educational psychologists and others interested in the care and education of young children, to try and define an environment that best serves their learning needs, while providing a safe and appropriate psychological space.

Psychological safety can be defined as the willingness to try new things, leading to agency (Wanless, 2016). At the Earth School, we believe that, additionally, a sense of belonging and security are hallmarks of psychological safety.

In this paper, we posit that high-fidelity Montessori schools, by their very design and structure, create psychologically safe spaces for children. We delve into aspects of the methodology such as the prepared physical and psychological environment and the prepared adult to demonstrate this. We further extrapolate this through examples from our practice and an explanation of how children acquire formal language skills in our environments.

Introduction

Psychological safety can be defined as the degree to which individuals feel comfortable attempting something new, leading to agency in interactions and experiences throughout their life (Wanless, 2016). At The Earth School, we believe that psychological safety comes from a feeling of being fully accepted while being supported by a prepared physical space, a predictable and reliable routine, and a caring and invested adult and community.

In this paper, we discuss factors embedded within the Montessori philosophy, beginning with our vision of the function of education. We then discuss the prepared environment, both physical and psychological, and the preparation and the role of

the adult (teacher) in Montessori schools. We highlight how each of these impact the experiences of children in school. We draw from our practice to highlight how all these factors coalesce to create an environment of psychological safety.

At the outset we would like to state the unique view of education in Montessori and at our school, The Earth School. The Earth School is a high-fidelity Montessori programme. Guided by the Montessori ethos, we have evolved unique practices that reflect our community and culture. We hold Montessori's vision for education very closely. Montessori (1948) states that her vision of the future is no longer of people taking exams and proceeding from one level of schooling to the next, but of individuals passing through successive stages of independence, by means of their own activity, through their own effort of will, which constitutes the inner evolution of the individual. This view of education is so different to the conventional view in which we are deeply entrenched, understanding Montessori requires a paradigm shift in how one thinks about school (Cossentino 2005).

Human Tendencies are the foundation on which the Montessori methodology is based. Mario Montessori (1957), son of Maria Montessori, defined human tendencies in a lecture given in the Netherlands. Tendency has its root in Latin, 'tendentia' which means inclination or leaning. They are the blueprint of what makes us human. Human tendencies are expressed uniquely at different stages of life. It is these Human tendencies that drive the child in self-construction helping them to adapt to their environment. Briefly, the human tendencies are: Orientation, Exploration, Imagination, Work, Self-Perfection, Movement, Exactness, Repetition, Order, Communication, Abstraction.

To understand how these human tendencies play out, here is an anecdote. Let us take the human tendency of Exploration. The primary child explores through their senses. They find out that water wets, fire is hot. Ask any child how ants taste and they seem to know that ants taste sour. The only reason they know this is because they explore with all their senses and gain information about their world.

The elementary child explores through their imagination and reasoning mind. They now know that ants taste sour but want to know why. Their questions may lead them to ecosystems where ants live and the cultures that use them. They may stumble upon the fact that people make chutney out of ants, and in the process wonder what other unique sources of protein are out there. They may chance upon Witchetty grubs in Australia, fried locusts in Africa and in this way their imagination takes them on a trip around the world!

The Adolescent is concerned with the social environment and how people and groups fit together. Hence, their questions, when exploring the same theme, will be different. What does it mean to be an indigenous person who is making these chutneys? How

does this work in a larger social milieu? And they may wonder how they, as individuals, are connected to these larger realities.

We can see how different these expressions of the same human tendency are at these different stages. Our goal as educators is to serve children as whole human beings as they go through these different stages.

The Golden Triangle

The Golden Triangle, in Montessori education, helps us translate these lofty goals into practice, giving us a firm path to follow. It refers to the essential connection between the child, the prepared environment, and the prepared adult. It has the child at the apex and has the prepared environment and the prepared adult at the other two vertices. The interplay between any two of these defines our experiences and creates change and opportunities for growth for all. All these three factors affect, respond, and change with each other. The primary motivator of this change is the child's developmental path.

The prepared environment

Physical preparation

Picture 1: Partial view of the language shelf displaying sandpaper letters and objects for oral phonetic games

The prepared physical environment is an important tool that allows adults to respond to and support the child's development. It is a very important precursor to the psychological environment present in our classrooms. Talking about the prepared

environment in Montessori, Standings (1887, p 267) says, "The environment is a place where the children are to be increasingly active and the teacher increasingly passive. It is a place where the child more and more directs his own life; and in doing so, becomes conscious of his own powers."

Picture 2: Longshot of the prepared environment

There are several aspects of a prepared physical environment.

For one, everything in the environment needs to be physically accessible to the children. This facilitates independence which in turns promotes a sense of agency for the child. For example, the child does not need to depend on an adult to carry out an activity in the environment. A peck-ish 3-year-old could go to the shelf, pick up a scooping melon activity, feed herself, share a snack with a friend, wash her dishes, replenish the material for the next child and be on her merry way. All of this, done independently.

Picture 3: Scooping melon activity

Another aspect of the prepared environment is providing only what is necessary and sufficient. This is informally called the Golden Mean in Montessori circles. What this ensures is that the child has everything that they need for their development, but no clutter that takes away from their experiences and scatters their efforts. The environment needs to be a calm and simple space, housing materials that appeals to the children's current developmental stages only. The space should be free of visual and auditory distractions. Such a space encourages alignment of the heart, hand and head.

As all work is chosen by the child and satisfies their human tendencies, we observe that children feel satisfaction at the end of their work cycle. This satisfaction promotes a sense of wellbeing.

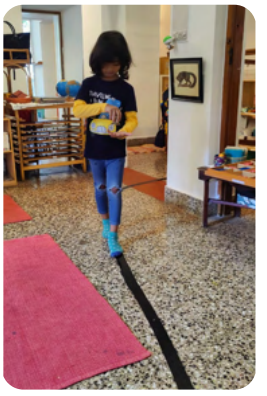
A third aspect of our prepared environment is that it is prepared with a sense of order. Order allows for everything to be in its place. Children are not only able to be independent but are "Working under their own steam" (Standing, 1887, p. 271). In time, their agency in the environment develops into a sense of understanding of how to use the environment. They are able to come in and start their work in 'their' environment even if the adult is not present. Standing describes the ownership children have of their environment as a "rapport between the children and their environment" (1887, p. 272).

Bullard (2013), found that children thrive in environments that are orderly and clutter-free. Order in the environment promotes concentration in the child and allows them to self-construct through freely chosen activities available in their environment that have been prepared by keeping their developmental needs in mind and through observation on the part of the teachers.

The prepared environment is also a tool for teachers to indirectly guide the classroom community through obstacles that they encounter as well as use it to inspire children to explore further. Based on observations teachers change, add to or take away materials and activities from the environment to help children focus on some aspects vis-à-vis others. This is the case for individual classroom environments, as well as, the whole school space. Teachers avoid the role of 'policeman,' constantly interfering with or directing them. When adults cease to be the sole authority in the space, children begin to take ownership of their own physical and social space.

To give an example, we noticed children sometimes wandering around the environment during the work cycle and distracting others. Based on our observations, we identified the path they were taking spontaneously during these times. We marked the path using tape on the floor and thus created a meandering line through the environment. It is customary in Montessori environments to have a painted ellipse in the middle of the classroom on which a "walking on the line" activity is conducted. However,

our ellipse evolved into a meandering line, following the children. We presented the activity to the children, showing them how they could walk on this line heel to toe. By doing so their attention was intensely focused on their physical movements. A stroll around class was transformed into a purposeful activity that brought their physical energies under the control of their will and they no longer interrupted their peers' work. What's more, rather than feeling policed by the adult when asked to stop their wandering, children felt a sense of satisfaction upon completing this work.



Picture 4: Walking on the line

One cannot overlook the specially prepared material in the Montessori environment. This is often the most recognisable aspect of Montessori. These materials are scientifically prepared and are in keeping with the various stages that all children pass through in their early years. They have deep appeal to the child. Over a period of time, many observations were made of how children in different geographies and socio-economic situations chose their work from an array that served similar needs (Montessori, 1962/1967). The classic Montessori material that remain in most environments today are a result of what diverse groups of children have consistently chosen over a period of time.

By working with the material children 'teach' themselves. The adult is the dynamic link between the two. For example, The Number Rods shown below.

Picture 5 : Arranging Number Rods

The adult shows the child how to count each band and arrange them from the shortest to the longest rod. When working with this material, the child explores the material and finds many permutations and combinations. Eventually, they may realise that the rod of 2 and the rod of 3 laid next to each other is the same as the rod of 5. In this way, some children arrive at addition through their own effort. The adult who first presented and encouraged the work with the material will now respond to the child by discreetly moving away so as to not disturb the exploration and at a later date may give a presentation that will help the child clarify this exploration. Thus, working with the material, the children have "taught" themselves, and the adult's role is to observe the child's work and provide appropriate input to help them progress. The child feels a sense of discovery.

In summary, at any given moment, our physical environment contains only that which serves the children in our care at that specific moment in time. It is set up and organised to promote agency and independence. The work available to the children is deeply meaningful to them, and encourages alignment of the head, heart and hand. After they have worked for a period of time in the environment, we observe children emerge from this work with a feeling of deep satisfaction. Finally, the environment itself gives children information about whether they are on the right track, both with their engagement with material and in their care of the environment. In this way, the environment itself is organised and predictable, providing children with a sense of certainty, and thus safety.

Psychological Preparation

The psychological preparation of Montessori environments is manifold.

For one, Montessori environments contain multi-age groupings based on developmental cycles. This means that the same community of children and adults remain together over three years in the primary programme and upto six years in

the elementary programme. The children stay in the same space, which grows and changes with them. Children build meaningful relationships with their community over several years.

At any given time, Montessori environments are a snapshot for the older children to see where they have come from and revisit it if they choose, and for the younger children to see where they are going. Older children get an opportunity to mentor younger children. They transmit the culture of the environment to the younger children. In this way, older children have authentic opportunities to apply their learning and development, and from here grows a deeper sense of ownership of the classroom community.

Picture 6 : An older child helps a younger one clean up

Multi-age groupings mean that children can self-pace their learning and are not 'stuck' to their age or to an adult driven timetable. As all materials that embody concepts and abstractions are available to the child through the entire span of time when they are in the environment, they can visit and re-visit these works through this time.

Another aspect and possibly one of the most significant, is the freedom that children experience in Montessori environments. These freedoms are based on their developmental needs rather than pedantic adult ideas of what is preferable which change according to culture and fashion.

Children have the authentic freedom to direct their intellectual, physical and social environments thereby constructing themselves. There are natural limits to these freedoms too. One child's 'freedom' should not come in the way of another's or of the community.

In Montessori environments children have the liberty to choose their work, stay with it for as long as they will and repeat work as many times as they want. Each child works at their own pace. As each child is making individual choices based on their own needs, the differing needs of a community can be accommodated with ease in

Montessori environments. This ensures that each child is getting what they need and is not tied to where their peers are. Working and developing at one's own pace is a joyous endeavour for children.

There is freedom to move purposefully within the environment, often within the inner and outer prepared environments. They also have the freedom to engage socially with others. Authentic freedom is a fundamental human need at any age, and without it, there cannot be any sense of wellbeing.

All work in the Montessori environment provides opportunities for auto-education. The control of error is often embedded within the material itself and not dependent on an adult to 'teach' the child. A child is able to see for themselves if they are on the right path and correct themselves without adult intervention. This helps cultivate a 'friendly feeling towards errors" (Montessori, 1995, p 246).

Children learn through exploration of the materials at their own pace and with their own unique considerations. As these materials and activities are so close to the nature of the child, children express deep interest in them and upon working on them with concentration exhibit satisfaction. This is something that is observed in Montessori environments time and again (Montessori, 1962/1967).

Picture 7: Two children working side-by-side on birds. The younger child is tracing a puzzle of a bird while the older child is drawing and labelling their external parts.

When children feel deeply rooted to a community, it fosters a sense of belonging. Meaningful relationships, freedom to choose work, stay with work and move purposefully in the environment, as well as the ability to self-pace their learning promotes a feeling of security and agency, which leads to a feeling of psychological safety.

The Prepared Adult

Coming to the third vertex of the golden triangle - The Adult. The foundation for the Montessori adult who is to work with children is the unique Montessori training. An understanding of the function of a prepared environment and the materials housed in it are a starting point. The Montessori adult is also called upon to truly understand the nature of the child and her role in the child's development.

Upon completing the course, the Montessori adult needs to be a changed person whose approach to the child is one of deep respect for who they are and their emerging faculties. "It is unquestionable that with this method of education, the preparation of the teacher must be made ex novo and that the personality and social importance of the instructress will be transformed thereby." (Montessori, 1988, p. 105).

The adult in the Montessori environment acts more as a guide than a teacher. She understands that the child develops by their own direction in the specially prepared environment and that she is the link between the two.

The adult is able to observe changes in the child and track their developmental path over the years that they are together and respond in accordance to the children's needs (Montessori, 1998). In turn, children build trust in the adult as her actions align with their needs. The gift of time, a prepared environment and flexibility woven into the structure of the environment and the day allows them to follow individual children and the community on their paths. This results in a beautiful relationship between children, adult and the space they call their own. The result is what Montessori calls "a cohesive community". (1995, Ch. 23).

The Science and the Poetry of Montessori

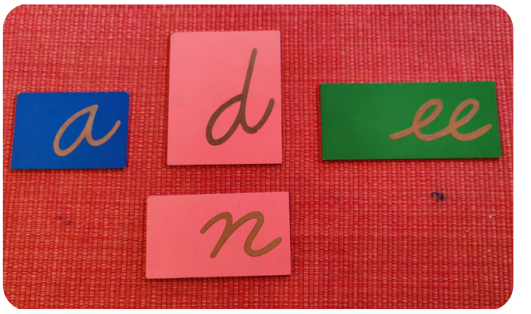
To practically illustrate how the prepared physical environment, psychological environment, adult and child come together, let us delve into how reading is approached in the Montessori environment. Writing is not taught directly. Instead it is deconstructed into its individual strands.

Language acquisition is a basic human tendency. Children are born with a sensitivity to acquiring the language spoken in their environment. It is on this base that they build a formal, symbolic language which gives one more avenue of expression.

Storytelling, singing, poetry, reading books and engaging conversation form the foundation that writing and reading are built upon.

Through games, children become aware of individual sounds that make up the words of their language. Can they hear the /c/ in cat? The next strand is helping the child associate the shape of the letter (symbol) with the sound it represents. As they are

tactile sensitive at this stage we do this using sandpaper letters that they trace. Their tactile sensitivity ensures that they enjoy this activity and choose to repeat it often. Through this repetition they make sound symbol association while also developing a motor memory for the shape.



Picture 8: Sandpaper letters

After they are able to recognise the vowels and some consonants they are ready to build words. Their hands might not be ready to write the shapes of the letters yet but making a material available to them that bypasses this limitation affords them the freedom to apply all they have acquired up until now. They analyze the sounds of a word and sequence them with the symbols using cutout letters. All though this time children work with a host of activities that help strengthen the hand muscles and build dexterity. All these strands come together when the child ties them up and thus emerges writing.

Picture 9: Child working with phonograms using the moveable alphabet

Reading comes a little later when children synthesise the sounds of words, putting it all together to arrive at reading and thus reading is discovered and not taught! These points of arrival come together through the child's own effort and is of the child's own

doing. It is not always a conscious process as they are not working towards a 'goal'. When they arrive at reading, it is a joyous discovery that one has the ability to know the thoughts of another who has not spoken and may not even be physically present.

Guiding all of this, is the adult, who observes the child with care and based on these observations, provides the child with the scaffolding required in their journey towards acquiring the skills of writing and reading.

All the activities that lead to the acquisition of writing and reading are chosen by the child as they are deeply aligned with his developmental needs. The materials used for these activities provide the child with freedom to work at their own pace and under their own steam. And hence, children self-construct their own learning feeling joy, purpose and agency.

Conclusion

Through examples from our practice as a high-fidelity Montessori school, we have explained how a Montessori environment is based on human tendencies and creates a safe, responsive and nurturing environment for children while serving their developmental needs. By doing so it promotes feelings of joy, competence, self-efficacy and self-determination (Lillard, 2019). The multi-age grouping promotes self-paced work and meaningful connections with peers. Indirect changes made to the environment helps the adult maintain a guiding rather than disciplinary role. Finally, the adult herself approaches the child, and the process of learning with curiosity, faith and enthusiasm. A child, growing and learning in these environments, generally feels confident to try new things, engage and interact with new ideas, situations and people demonstrating significant psychological and emotional safety.

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9. Play-based Pedagogy and Practices in Chetan Balwadi

Rachana Bhangaokar, Namita Bhatt and Jayana Padalia

Abstract

Play based pedagogy is an educational approach that emphasises the importance of play in children's learning and development. This pedagogy is grounded in the belief that play provides a natural context for children to explore, experiment, and understand the world around them and thus should be a fundamental aspect of early childhood education. The paper elucidates salient curricular features and teaching-learning practices of Chetan Balwadi (CB): The Laboratory Nursery School of The Maharaja Sayajirao University of Baroda, Gujarat, India that supports a child centred pedagogy and playway approach to early learning. The paper highlights significant features about play as a pedagogy and the way they unfold in CB across everyday classroom practices.

Introduction

Established in July 1949 as a Laboratory Nursery School for the Faculty of Home Science, Chetan Balwadi (CB), a university-run laboratory preschool now in its 75th year, is managed by the Department of Human Development and Family Studies (HDFS), The Maharaja Sayajirao University of Baroda, Vadodara. Since its inception, its philosophy has evolved based on current scientific research and keeping in mind the social, economic and cultural conditions of the community. Its overarching aim has been to provide a rich and stimulating environment for young children promoting their holistic growth and development. The programme's emphasis on social, emotional, and cognitive development aligns with NEP 2020's vision of holistic education, ensuring children receive well-rounded foundational education (NEP 2020). The Balwadi has been a training ground for students enrolled in the undergraduate and postgraduate programmes of the Department of HDFS. As a learning resource centre, CB is also visited by teachers, supervisors and administrators of various private, government and voluntary organisations engaged in programmes of early childhood education.

Play-based pedagogy

Play is a fundamental resource for children's learning (Baker & Ryan, 2021). Play-based pedagogy is a child-centred learning approach that integrates play with educational activities, allowing children to learn through engaging and developmentally appropriate experiences. This has been shown to promote various aspects of development, including cognitive, social, and emotional growth. Piaget's (1964) theory of cognitive development posits that play is crucial for children's cognitive growth. Through play, children engage in assimilation and accommodation, which are key processes in learning. Vygotsky emphasised the social aspects of learning and the role of language in cognitive development. Play is seen as a leading activity that promotes development, particularly through the Zone of Proximal Development (ZPD), where children perform tasks with the help of more knowledgeable others. Friedrich Froebel, known as the father of kindergarten, advocated for the educational value of play and introduced play materials (Froebel's gifts) to facilitate learning through exploration and creativity, (Mooney 2000).

Research supports the benefits of play-based pedagogy in early childhood education. For instance, Pyle and Danniels (2017) highlight that this approach helps children develop critical thinking and problem-solving skills while also fostering creativity and imagination Parker et. al. (2022). Additionally, the National Association for the Education of Young Children NAEYC (2020) underscores the importance of developmentally appropriate practices, advocating for play as a fundamental component of early learning environments.

The Organization for Economic Co-operation and Development (OECD) also emphasises the value of play in educational settings. Their reports indicate that integrating play into the curriculum supports a smooth transition from early childhood education to primary schooling, enhancing children's overall learning experiences Parker et. al. (2022). The National Education Policy, NEP 2020 marks a significant shift in India's approach to education, emphasising holistic, inclusive, and flexible learning. A particular focus is placed on early childhood care and education (ECCE), recognising it as the foundation for lifelong learning and development.

Overall, the evidence strongly supports play-based pedagogy as an effective approach to early childhood education, promoting a range of developmental benefits that prepare children for future academic and personal success. As a case in point, we now describe some fundamental aspects of play-based curriculum and pedagogy from Chetan Balwadi.

Curriculum and pedagogy in Chetan Balwadi

With historical roots in John Dewey's progressive educational philosophy and anchoring onto principles of learning by doing, the pedagogy of CB is firmly ingrained in planning and providing developmentally appropriate, play and activity-based curriculum scaffolded by new ideas and willingness to view the early childhood curriculum as ever-changing and evolving out of societal and children's needs at a given moment of time. The programme is inherently dynamic, flexible and provides children with opportunities for exploration, discovery, experimentation and observations. Structured and free play, first hand experiences and active verbal interactions with children are employed skilfully by well trained and observant teachers to achieve specific curricular objectives. Attitudes of active exploration, experimentation and observation are encouraged and the approach to reading and writing are gradual, beginning with pre-reading, pre-numeracy and pre-writing skills. Parents are actively involved throughout the year by way of well-planned programmes and they serve as partners for strengthening the CB programme.

A comprehensive programme is designed in which children aged 3 to 6 years are exposed to progressive experiences from the nursery class to kindergarten. Within the broad areas of development, the programme focuses on major domains and sub-skills within each, for example:

Language: Verbal fluency, vocabulary (labelling and word recognition), ability to follow instructions

Cognitive: Concepts related to immediate environment (science, math and social studies), simple problem-solving abilities and skills in visual and auditory perceptions

Socio-emotional: Develops positive self-concept, abilities to function effectively in groups (cooperation, leadership, decision making, self-confidence), ability to express one's own self

Physical-Motor development Muscle coordination (large and fine motor development), eye hand coordination, habit formation and so on

Based on the long-term objectives of a particular class, the teachers prepare weekly pre-planned activities based on specific objectives appropriate to the developmental level of the children. The curriculum aims to develop abilities and concepts with reference to basic themes from children's everyday lives. One of the chief characteristics of the programme is its emphasis on locally available, low cost - no cost indigenous materials that are used imaginatively for activities with children. Children's progress is monitored through a developmental assessment checklist, cumulative records of children and the teachers' observational notes.

Play and early learning

Play and learning are interconnected, forming an inseparable part of children's experiences. Samuelsson and Johansson (2006) assert that his combination helps them understand the world throughout their lives. As described in the previous sections, the CB curriculum actively focusses on play-based pedagogy and following are some of the key aspects which places the curriculum in the realm of an effective child-centred, play based pedagogy.

Types of play

Engaging in play is essential for a child's healthy development, as research indicates that 75 percent of brain development occurs after birth and play stimulates the brain by forming connections between nerve cells (Anderson-McNamee & Bailey, 2010). The CB curriculum is played out across the following types of play; inherent to a play-based pedagogy:

Free Play: Unstructured play where children choose their activities and playmates. It promotes autonomy and decision-making skills.

Guided Play: Play activities are planned by educators but allow children to explore within a set framework. This combines the benefits of structured learning with the freedom of play.

Structured Play: Activities with specific learning goals, guided closely by educators. While more structured, these activities are designed to be fun and engaging.

Play-based curriculum

The curriculum is centred around play and hands-on experiences. Heang et. al. (2021) opine that play-based learning offers children opportunities to understand the world through inquiry, exploration, interaction, and problem-solving. Provision of open-ended materials and activities that promote exploration, creativity, and problem-solving skills ensure that both children and teachers are engaged in meaningful interactions. The curriculum is structured around children's natural urge to explore, discover, and make sense of the world around them through hands-on activities and social interaction. For example, introduction of new themes/topics, or transitioning from active to quiet activities often entails the utilisation of impromptu poems/songs as a means of giving instructions. A single theme is explored from a variety of dimensions, including sensorial, utilisation of visual arts, nature walks, field trips and hands-on experimentation. Each of these strategies is specifically designed to respond to age-appropriate needs of children and ensure that they are meaningfully engaged.

Child-centred learning

The interests, needs and abilities of each child are prioritised. Efforts are made to design learning experiences that are tailored to individual children's developmental levels and learning styles. The curricular transaction within the classroom focuses on the needs, interests, and abilities of the child, rather than adhering strictly to a prescribed curriculum. Children are encouraged to be active participants in their own learning, collaborate with peers and teachers and act as decision makers. For example, children are often asked to choose the art activities, stories, songs they would like to engage with and are also involved in preparations for the same. The role of the teacher at this juncture is to guide their emerging capacities and help them choose.

Mother tongue-based curriculum

The programme is transacted in Gujarati (regional, state language) as most of the children come from Gujarati-speaking backgrounds. Teachers also use Hindi and sometimes Marathi. According to Nishanthi (2020), mastering the mother tongue is crucial for a child's overall development. A multi-lingual programme helps build strong foundation for various developmental domains among young children. It improves communication skills as well as helps teachers in creating stronger bonds with children. It also helps children to settle in the new environment and approach teachers without hesitation. Multilingual approach is used in various sessions such as music and movement, storytelling, group discussions and so forth. Parents and grandparents are also invited to the classrooms where they can share bilingual or multilingual stories and songs in their native languages. This creates a stimulating environment for children and assures them that differences must be accepted and celebrated.

Individualised instruction

The inherent premise of the programme emphasises recognition of and respecting each child's unique abilities, interests, and learning styles. Whenever possible, teachers provide differentiated instruction to meet diverse learning needs, offering support for those who require it and enrichment opportunities for those who excel. Teachers and supervisors often plan play activities at varying levels of difficulty to accommodate different skill levels of children. Children are also given choices in activities and materials to cater to individual interests and learning styles. Teachers use techniques such as prompting, questioning or demonstrating as required, to guide learning. When necessary, for certain parts of the day/activities, children are grouped dynamically based on their current needs, skills, and interests rather than fixed groups. Teachers are expected to discuss observations of children and assessment data on a regular basis. Based on this, specific inputs are provided for children creating a sustained

foundation of respecting the child and her growing abilities. Labelling of children or speaking / addressing them in loud voices or behaviours that are disrespectful of the child's identity are strongly discouraged and avoided. Similarly, accommodating each child's ability/inability to perform a certain task on hand is accepted without any undue pressure on the child or his/her parents. Parents are firmly counselled to avoid having unrealistic expectations from children.

Language and literacy skills

The emphasis is on gradual immersion of children of 5 years age and above, from developing early reading and writing experiences to effective language use and literacy skills by active engagement in a language-rich environment. Children are encouraged in various activities like storytelling, reading aloud, and opportunities for self-expression through the written words/symbols.

Numeracy skills

The programme focuses on developing number sense, problem-solving abilities, and mathematical reasoning skills. The aim is to foster numeracy skills through hands-on activities that build a strong foundation in mathematical concepts. Each class has their unique set of activities to build literacy and numeracy.

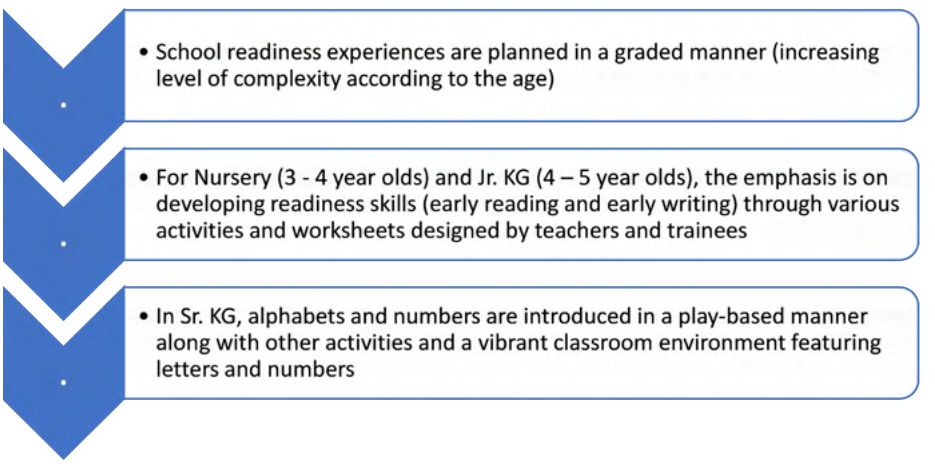

Figure 1: Language/Literacy and Numeracy Development

Social and Emotional Learning (SEL)

An active and strong component of the programme is to integrate social and emotional learning into the curriculum to support children's emotional well-being

and interpersonal skills. Through repeated and explicit instructions and modelling, teachers and supervisors take the children along on a journey of self-awareness, self-regulation, empathy, and effective communication. Teachers, supervisors, support staff of the institution and students are trained to demonstrate empathy, effective communication, and healthy coping strategies which serve to provide children with examples to emulate. There is a strong emphasis on encouraging children to articulate their feelings by teaching them a wide range of emotional vocabulary. For example, 'I unintentionally/accidentally tore off the doll's head', 'I didn't mean to hurt my classmate'. This helps them better understand and express their emotions. For example, when a rule is broken or a child physically hits another, the teachers calmly talk to the child and give the child opportunities to self-reflect on their actions. Children have a choice of going to a corner in or outside the classroom, reflect on their behaviour and come back with possible solutions to rectify the damage. Selection of stories sometimes entail themes which would encourage children to see things from others' perspective and discussing various viewpoints help them understand a wide range of emotions. Children are gently guided through a systematic process of solving social conflicts and challenges, starting with identification of the problem, brainstorming solutions, weighing the consequences, and choosing the best course of action. Safe and respected learning environment of the classrooms ensures that children feel emotional security and are free to open up. When necessary, activities like deep breathing, meditation, and yoga are introduced to help children manage their emotions and reduce stress. Every effort of children in managing emotions and interacting positively with others is acknowledged and reinforced from time to time. Children are often reminded of their collective choices and classroom rules or behaviours agreed upon by consensus that are reiterated in a friendly, non-threatening manner.

Documentation and reflection

Children's learning experiences are well-documented through observations, photos, and children's work samples that are regularly displayed in the learning environment and shared with parents and families. These help to reflect on children's progress and interests that are further used to inform future planning and curriculum development.

Collaborative learning

The learning environment has ample spaces which encourage collaboration and peer interaction through group activities, cooperative projects, and collaborative problem-solving tasks. Teachers often engage children in collaborative learning with specific aims to foster social skills, teamwork, and communication skills. Children with different competencies and abilities are grouped together in class activities and peer learning is supported through guided interactions by the teachers.

Salient features

In a nutshell, the CB curriculum has the following salient features in its structure and as a developmentally appropriate, child-centred, play-based pedagogy.

Child-centred learning: Activities are designed to be engaging and relevant to each child, allowing them to take the lead in their learning. As a case in point, the Project Approach (Katz & Chard, 1992) with its firm mooring in supporting developmental goals through play-based and inquiry-based learning has been an integral part of the CB curriculum since years. Across all three classrooms, a specific month of the year (December or January) is earmarked, and children engage extensively in investigating a topic of interest, allowing them to explore, ask questions, and solve problems collaboratively, thereby fostering critical thinking, creativity, and a love for learning. During Project Approach children make several decisions in terms of what they want to know and how they will achieve their goals. The approach culminates with a two-day exhibition where children take the visitors through the journey of their discoveries through displays, models, and artwork. Children are taken to field trips to give them a first-hand experience. Teachers and supervisors are always vigilant about their development needs and maintain critical observations to understand their current requirements. Teachers carefully keep track of their curious questions and inquiries and weave them into their daily plans.

Active engagement: Children learn best through active participation, are encouraged to manipulate materials, solve problems, and make decisions. Children are involved in all conversations, decisions, and activities. During project approach children are asked to choose the topic of inquiry, they also choose what they want to learn and what would be the trajectory of the inquiry. Teachers also hold discussion to decide what changes they want to make in classroom decoration or what songs to select in for annual dance concert. Ownership means that children feel empowered to take charge of their own learning. For a playful learner, this sense of ownership encompasses feelings of significance, encouragement, freedom, pride, and belonging to something greater than themselves (Pedagogy of Play at Project Zero, Harvard Graduate School of Education, 2019).

Holistic development: Activities are designed to promote a well-rounded development. Curriculum is designed to enhance all the developmental domains such as cognitive, physical motor, language, socio-emotional, creative and aesthetics. Each activity caters to more than one domain, for example, group discussion caters to critical thinking as well as enhances language development and promotes confidence in speaking in groups. It also encourages children to be articulate and speak in full sentences.

Exploration and discovery: Play-based learning encourages children to explore their environment, ask questions, and make discoveries. There are several activities that are curated for children to pique their interest and curiosity. Indoor and outdoor freeplay help children spend time with the material present in the environment. They take their time to be with the toys, games, puzzles, trees, leaves, sand and so forth. We include new topics based on children's interests and curiosity. For example, children were intrigued by earthworms during monsoon season. They spend hours watching earthworm digging holes in the ground. That week we had earthworms and other insects as a topic during our group discussion. Such activities foster a sense of curiosity and a love for learning.

Social interaction: Social interactions take place in the entire day at the Balwadi. Child to child interactions can happen while they are building block structures, solving puzzles, doing group art activities, playing in doll's corner, and so forth. They also interact while they are eating lunch or having mid-day snack. There are several scopes for children to interact and develop relationships with other children, teachers, support staff, and material in their environment. Teachers design cooperative games and child directed activities so that children develop important social skills such as cooperation, negotiation, and empathy.

Creativity and imagination: Through play, children express their creativity and imagination. Role-play, storytelling, creative arts, allows children to think outside the box and innovate. These activities help children express themselves through art, music, movement, conversations, and so forth. There are activities where children can create stories and songs. There are also activities where children recreate the endings of their favourite stories. They also create songs and stories related to the topics they are discussing during group discussions. Free art is another activity which is extensively done across the three classes. This helps children to think and reflect upon their ideas and express creatively. There is enough freedom and space for children to think creatively.

Conclusion

Play-based approach is vital for children's overall learning and development. Active engagement and social interactions make children thoughtful and involved in their own journey of learning. Play-based pedagogy, with strong support of theories and philosophies, helps in enhancing all the developmental domains and enriches the academic and life success of children. CB curriculum is rich in creative and interactive activities. There are so many opportunities for children to indulge in their own learning journey. With project approach, they could navigate their learning process; with music, movement and art activities they have a safe space to express themselves, and with group discussions they can voice their ideas and opinions. The continued

advocacy and implementation of play-based learning require collaboration among educators, researchers, policymakers, and families to ensure that all children have access to high-quality play experiences in their educational journeys.

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10.

Significance of Music and Movement in the Early Years: Exploring practices at Greenfields Pre-primary School, Mumbai

Purnima Contractor, Aloka Dutta Gupta and Jayna Jagani

Abstract

Importance of music and movement has been advocated in various research and pushed for by educators and professionals in early childhood education (here on, ECE). Pioneering research by Howard Gardner tells us how children are born with different intelligence, out of which, music is the earliest form of intelligence to emerge (Gardner, 1993). The paper explores the role of music and movement in building skills of language, creativity, emotional well-being and way of thinking in children.

Drawing from the different perspectives on significance of music and movement, this paper throws light on what National Curriculum Framework for Foundational Stage (2022) says about different learning styles, integrated approaches to music and movement and how this has been integrated into the music and movement curriculum of Greenfields Pre-primary School, Mumbai. This paper also advocates for introducing music to children from an early age, not necessarily formal training, but teaching concepts through music and movement for better retention, emotional wellbeing and learning among children. Some challenges which come across are discussed, and expectations from stakeholders of ECE are drawn. In conclusion, the aim is to develop a love for music and movement by teachers, school management authorities, parents and importantly children.

Importance of Music and Movement in Early Years

Early childhood offers a critical window of opportunity to shape the trajectory of a child's holistic development and build a foundation for their future. The first few years of life are considered a critical period in brain development because the brain

is more sensitive to experience. During this time, the brain is especially responsive to external input. The brain can capture experiences more efficiently than it will be able to later.

Children's brains are built, moment by moment, as they interact with their environments. The quality of a child's early experiences makes a critical difference as their brains develop, providing either strong or weak foundations for learning, health and behaviour throughout life. Gaps that emerge in the early years can persist into the school years and beyond. Early intervention has a vital role to play in identifying children who may be showing atypical development and in helping to develop the skills and competencies that set a child up for life.

For children to achieve their full potential, as is their right as a human, they need health care and nutrition, a sense of security, opportunities for early learning, and responsive caregiving – like listening, talking, playing, singing – with parents and caregivers who love them.

Numerous studies point to importance of introducing music and movement in ECE. These studies highlight the effects of musical instruction (both formal and nonformal) in abilities of the brain to process sound, language development, speech, and reading skills (Gersema, June 20 2016). Research which focuses on specific skill development indicate an improved sense of auditory discrimination, pattern recognition, literacy skills, hand-eye coordination, spatial awareness, sequencing, emotional wellbeing and stimulation of senses through beat, tempo and rhythm (ELJ, 2021).

With these implications and benefits, it becomes imperative to discuss music and movement in ECE in the Indian context and whether our policy documents mention it and recognise its significance. The practices at Greenfields Pre-primary School showcase a planned yet crafted introduction of music in the daily lives of children. In the subsequent sections, we see how music is introduced in the regular school routines and effectively forms a part of the daily teaching and learning experiences of both teachers and children.

Music and Movement: Effect on brain development

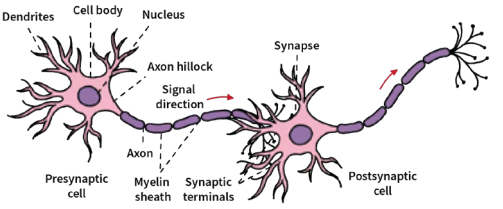
Infants and children need not be taught to respond to music! Practitioners in the field of ECE can vouch for this that once any kind of music starts to play, children often respond by doing any form of movement or jump around freely. Infants respond to familiar sounds in the environment, a mother's voice singing a soft lullaby, a nursery rhyme playing in the background and so on. In this sense, music can be considered a child's first language, which they use for expressing themselves and understanding the world around (Turnbull, 2014).

Early in our journey of teaching young children we realised the role music played in the lives of children. A simple warming exercise of movement of hands and feet to numbers called- a clapping activity became a joyful and participative one when a simple song "*clap your hands clap your hands, listen to the music and clap your hands*" was added to it.

This is because research says that when music is added - a huge number of neurons are fired. Making it thousands of times more effective.

> 'In the first few years of life, more than one million neural connections are formed each second. This pace is never repeated'
>
> UNICEF, U. (n.d.). *Early Childhood Development*. UNICEF: For Every Child. www.unicef.org

Picture 1: How our brain stores and retrieves information

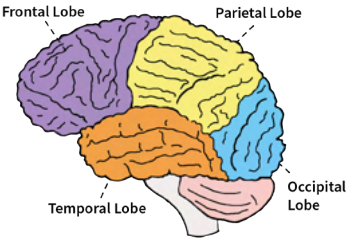


Picture 2: Structure of a neuron

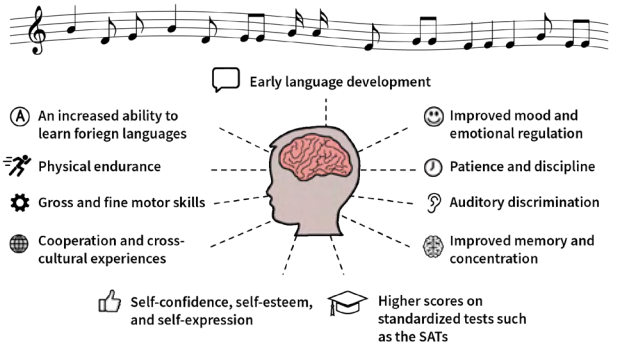
Source: Brain Power Unleashed: How Positivity Rewires Your Mind for Success (youtube.com)

What Is a Neuron? Diagrams, Types, Function, and More (healthline.com)

Research on children's brain development reveals how music activates neural pathways, and connects two hemispheres in the brain, which leads to a range of benefits- increased problem-solving ability and emotional resilience. Music is all around us, a child's brain is more receptive to music as it can sense varied inputs from the world outside and build connections-mother's voice, a distant rhyme playing in the background, birds chirping, notifications on our phones and so on. Professor Daniel Levitin in his book 'This is your brain on Music' argues that human brains are hardwired for music, as it helps in the sensory development of infants and provides a connection in all four lobes of the brain- frontal, temporal, parietal and occipital in addition to cerebellum (Levitin, 2006).



Picture 3: Different parts of the brain



Picture 4: Benefits of music on child development

Source 3: When the Brake Sticks: Frontal Lobe Function, Damage, and Management (youtube.com)

4: School of Rock | Kids & Music: Effects of Music on Child Development

Literature Review

Theorists John Dewey, Jean Piaget, Lev Vygotsky, Urie Bronfenbrenner, and Karl Newell have provided valuable insight on how children learn by exploration of their environment and how to design the environment to facilitate learning, and Emile Jaques-Dalcroze recognized the importance of learning music through movement. Jaques-Dalcroze provided knowledge and appreciation for the role movement plays in feeling and understanding music.

Émile Jaques-Dalcroze (1865–1950), Swiss professor of music had a strong effect on music education. His work was based on the concept that rhythm is the primary element of music (Lois Choksy, 2001). He felt that many students had a mechanical understanding of music but did not feel and express music. The result was a career spent finding a way for people to use movement to feel and understand music. Jaques-Dalcroze realized that of the three elements of music (pitch, rhythm, and dynamic energy), two—rhythm and energy—depended on movement. The result was eurhythmics, a way to stimulate musical learning. He postulated that when the body moves, it stimulates the mind and enforces learning. His work is important because he understood the importance of movement in learning. The research and work of these theorists are important in developing an understanding of how parents and educators should stimulate learning, particularly through movement and music.

Music enhances the learning domains

Children learn through their senses; all the domains—cognitive, language, socio emotional and physical—should be integrated in the learning process. Music plays a vital role in the sensory development of infants. When children hear a sound, a beat, a rhythm, or a song, their brains are stimulated to make important connections to the developing nervous system. When children hear a beat of a rhythm or a song, they move—even when seated or lying down. Their arms, fingers, legs, or toes move, increasing stimulation to the developing brain and strengthening muscles. As the child moves, air molecules move, and the nerves located on the skin are stimulated by the flow of the air over the body— (Levitin, 2006). Moving air becoming a carrier for smells—the sense of smell is stimulated. Movements—up, down, and around—cause the eyes to constantly adjust to the surroundings; this stimulates the sense of sight and all the brain receptors connected to seeing. The senses of hearing, touching, smelling, and seeing are heightened, helping to enliven and to integrate the learning domains. Learning becomes enjoyable for the child.

The recently released document, NCF-FS, 2022 describes how education must focus on the overall development of child. It goes back to Indian tradition of five-fold development or 'Pancha kosha Vikas' which describes the progress of the whole child. The five-fold development sheaths are: Physical layer, Life-force energy layer, Mind layer, Intellectual layer, Inner self.

- Anna Maya - music and movement helps in physical development
- Pranayama - music helps in breathing correctly
- Manonmaya - emotional development as it creates joy and happiness. Even sadness, fear and sorrow can be expressed in a song –e.g. "A zebra in the zoo ----tiger has stripes" enables the child to express all the different emotions- both love and fear! Link for the song: Zebra in the zoo – Greenfields - Zebra in the zoo (English) (youtube.com)
- Vignanamaya - cognition of tune, pitch, also concepts and ideas etc that come in the song
- Anandamaya - absolute bliss that one feels when one hears music. You can see children enjoying and dwelling in the music – eg., "there's a friend for children above the bright blue sky" - Greenfields - Universal Prayer (English) (youtube.com)

It was also noticed that children are born with and have the capacity to understand the tempo, pitch, rhythm of a music played. For a slow-paced music, automatically their bodies moved slowly and similarly for a high beat tune their movements were faster!

Music and motor development

Movement is a child's birth right and Music invokes movement which in turn helps children develop both fine and gross motor skills. Clapping, tapping, jumping, stomping, patching bouncing, and dancing helps children improve their brain and body coordination, equilibrium, attention, and intellectual abilities. Simple songs with a back-and-forth rhythm can help toddlers improve brain and body coordination. Warming up songs develop gross motor skills and limbering of the muscles, which helps in everyday functions and strengthen muscles and body posture. A clapping action for midline crossing actions promotes bilateral coordination.

Music helps in developing their fine motor skills-which helps to be able to hold, catch, throw, write, draw, cut etc.

Music helps improve memory, perception, language, attention, emotion, and decision making. When language is combined with movement, learning increases by 90%.

Music and socio-emotional development

Music becomes a powerful vehicle for emotional expression and regulation in early childhood. As mentioned earlier, exposure to music strengthens the corpus callosum, the tissue that connects the two hemispheres of the brain. With that connection strengthened, a child will be better equipped to regulate their mood, emotions, and behaviour.

Elizabeth Dumont et al. (2017) conducted a meta-analysis of four studies concerning the influence of music education interventions in early childhood and pre-primary school on children's social skills. Three of the studies suggested that music education has a positive influence on social skills (Ritblatt et al.1 Jan 2022)

Through musical experiences, children learn to create opportunities for social interaction and collaboration, identify and convey emotions, from group singing to playing musical instruments together, children develop crucial social skills such as communication, cooperation, and teamwork laying the groundwork for healthy emotional intelligence. The rhythm, melody, and lyrics of songs provide a rich palette for emotional exploration. Let us look at the circle time song, which helps in developing the child's self-worth; gets them emotionally and mentally prepared for the tasks ahead.

A circle time song: - It's you I see, it's you I see, Hello hello hello !

Hello Miku, hello Siddharth ... Its you I see, it's you I see, Hello hello hello ! I am so glad you are here today – Hello hello hello!

Music being used to teach concept of Patriotism:

A vague concept for the children of the early years, when introduced through music and movement- with basic marching actions, becomes a part of their holistic development

Sabsae pyara desh hamara: Greenfields - Sabse Pyara Desh Hamara - Patriotic Song (Hindi) (youtube.com)

Our Indian flag has - Greenfields - Indian Flag - Patriotic Song (youtube.com)

Music and language development

Music permeates all aspects of life, our own earliest memories are rich with music: beginning with soft lullabies on a parent's lap; the rhymes in the preschool years; rocking in our teenage years, to music of all genres till the end of life.

In India our children are growing in multi-cultural and multilingual environments. With music playing such a major role in the brain and language development in the early years, a classroom rich in variety of different languages, provides opportunity

for acquisition of languages from the very beginning and this must become the norm. So, exposure to simple regional songs in different languages stimulates the brain to an optimum level.

During the Project on transport, we took a folk song of Bengal used by boats men while rowing down the Hooghly River: Hai ho ho haiya Greenfields - Haiyya Ho! (Hindi) (youtube.com)

In our own setting at Greenfields, we have children from Gujarati, Marathi, English and Hindi speaking back grounds. It has been observed that children are very comfortable with songs in different languages: *nana mara haath e to taali pade saath – e kevi ajab jevi vaat che (Gujarati) to mor bagha mor chaan chhan mor bagha bagha sa mor (Marathi) to kuch beej thae gaye gehrayee mae boye, un beejo kae andar thae kuch nanhae poudhe soyae* to "here's a colour there's a colour, colours everywhere, so many colours we see everywhere"!

Kuch beej thae gaye - Greenfields - Germination (Hindi) - YouTube

We believe that whether the language is familiar or not but when done with music and movement it helps to develop language and above all , with understanding!

Music is more powerful language and can be used as a great medium of instruction!

Cognitive development through music

Recent research underscores the cognitive benefits of musical engagement in early childhood. Musical activities stimulate brain areas associated with language processing, memory consolidation, and mathematical and logical reasoning.

Under the blue sea: Greenfields - Under the Blue Sea (English) (youtube.com)

Music may expose the child to challenges and multi-sensory experiences which enhance learning abilities and encourage cognitive development. Music can also engage in executive functions (EF) such as planning, working memory, inhibition and flexibility. Music education may be a promising tool in improving EF as it activates multiple cortical and subcortical brain areas, including the prefrontal cortex, which is linked to EF (Dumont E, 2017). E.g., a musical *"Time to put your toys away, toys away.... there are other things to do"* – gets the children to clear up the setting and preparing for the next activity.

Other concepts which have been explored using Music and Movement are monsoon season, the animal world, water creatures, the plant kingdom – germination; transport, their own selves, festivals, junk food and healthy food, the universe, the list is endless!

La la la Diwali is here - Greenfields - Diwali Song For Children (English) (youtube.com)

Ginger and spinach using same tune in two languages- Greenfields - Ginger & Spinach Song (youtube.com)

Music involves elements of rhythm, beat, and patterns, which stimulate mathematical and logical thinking in young children. By clapping, jumping, moving or playing instruments in time with the music, children develop a sense of timing, sequencing, and spatial awareness and become an active participant in their own learning. This engagement with musical patterns lays a foundation for mathematical concepts such as counting, sequencing, and recognising patterns.

Numbers everywhere- Greenfields - 1-10 Numbers Song (English) (youtube.com)

It is fairly established, the role that music and movement plays in the development of young children. It is thus critical to discuss how it can form a part of regular school curriculum and become a part of the daily routine.

Music in the curriculum: To bring out the musicality of the child and the teacher

Integration of music into early childhood education curricula is crucial for providing a well-rounded learning experience. Strategies include incorporating music into daily routines - from welcoming them to school - with a musical "*Good morning – Namaste – Vanakkam*; using songs for limbering of muscles, to teach concepts, and utilising music to enhance storytelling, till a *Its time to put our toys away* cleans up the environment and prepares them for the next activity; and at the end of the day, *a good bye song/it's time to go home*. Where you will have children responding by taking their bags/ water bottles and automatically standing in lines or groups ready for dispersal. And you will have a content child going back home excited to share all the happy learnings of the school with their family!

Music can be used to teach every concept! If songs with movements are added to every project, then learning becomes organic, enjoyable, participative with children.

Children become frogs, snails, earthworms during the monsoon season

Baarish jab aati hai to froggy ata hai- Greenfields - Rain Song (Baarish jab aati hain to froggy) (youtube.com)

For transport, the whole class becomes cars, buses, trains, boats

Pomp, Pomp, Pomp- Greenfields - Vehicles - Cars, Buses, Ship, Trains - Transport (English) (youtube.com)

Parts of the body- Greenfields - Parts of the Body (youtube.com)

Songs such as these provide a seamless integration of music into various subjects and brings about the holistic development as well as the emotional wellbeing of the child.

More activities can be done with Musical sets –seriate instruments from large to small; classify into sets, subsets.

Listen to Sounds of nature – sound of raindrops on different objects, thunder, lightning, chirping of birds. Listen to vibrations of rubber bands stretched across cardboards. Utilise music to enhance storytelling and so on.

Role of technology

As technology continues to play a significant role in education, it's essential to explore age-appropriate digital tools. To introduce music, one doesn't have to be a music expert, there are digital platforms designed to introduce music to young children. Greenfields has uploaded many of the songs created by them on YouTube which is freely available to educators and parents. A balance between traditional and technological approaches needs to be maintained to ensure a comprehensive learning experience. The link to the songs of Greenfields on YouTube is

Greenfields Learning Hub, Mumbai - YouTube

Use of traditional instruments

While designing a classroom space for young children, there has been a push for creating specific corners to stimulate and engage children. Schools can create a music corner where instruments like drums, dholak, khanjari, ghungroos, shakers, harmonium (an old one), tambourine etc., can be placed with easy access to children.

This will help in building exploration and developing a sense of rhythm, pitch, tone and tempo. Traditional instruments can also help in creating awareness about Indian cultures and traditions, which is one of the learning goals -Aesthetic and Cultural Development as mentioned in NCF-FS 2022.

Essentials of creating a music and movement programme

Including a music and movement schedule in the daily routine requires a careful understanding of the learning and developmental needs of children. A well-balanced programme which is multi-lingual and multi-cultural, having enactment and movement integrated throughout the day. The day can also be filled with non-sensible syllables, rhythm patterns and repetition.

A non-sensible rhythmic pattern:

aa Winnie Winnie ka ya winni ; aiaiya ikicha ka wenna; aani aani, mini min; aani mini; mini aani – fish!!!

Teachers and their perspective

It is also crucial to understand the role of teachers in developing and implementing a daily schedule filled with music and movement. To effectively incorporate music into early childhood education, teachers need not be necessarily trained in any form of music/musical instruments, rather a change in their perspectives is needed. For which teacher training is essential.

We at Greenfields conduct regular Music and movement workshops for the professional development, helping educators use their body, developing a sense of rhythm, shedding their cultural inhibitions, and expressing through music and movement. Equipping them with the skills and confidence to integrate music into their teaching practices and above all finally enabling them create music for their own classrooms. Teacher must use her own voice, maybe an ordinary voice + enthusiasm works wonders, while conducting music and movement sessions, thereby building and strengthening relationships between teacher and children, focusing on their overall wellbeing and **bringing out the musicality of the teacher and the child!**

Pictures 5 and 6: Teacher workshops at Greenfields

Parents and community

Parent and community involvement is very important. Schools need to share their resources, and help them to identify culturally appropriate and relevant resources. This will lead to continuity between school and home and will also engage children with age-appropriate music.

Challenges of implementing a music and movement programme

There are numerous challenges that come to light while executing a music and movement programme. Some of the prominent ones are - disparities in access to musical resources and instruments in providing a comprehensive music education.

Non acceptability of school management in understanding the role of music can be a big hindrance. Strong advocacy is needed here.

Conclusion

- Music is everywhere; we are born with music within us; and can be a very important tool for learning and education in the early years.
- Music stimulates brain development and activates the whole brain.
- Music plays a key role in the holistic – physical, social, emotional, language and cognitive development of the child in early childhood. Brings out the musicality of each child.
- Using multilingual and multicultural songs exposes children to a wide range of cultural traditions and diversity.
- Affects the Panch Koshas.

- Empowering educators to understand their own musicality and use the power of music to teach concepts and finally create their own music
- Must be incorporated in the curriculum. Inclusion of age-appropriate music in the early years settings is very doable and creates a conducive environment for learning. And enjoyable both for the teacher, parent and the child. Then childhood and learning become a happy musical journey!

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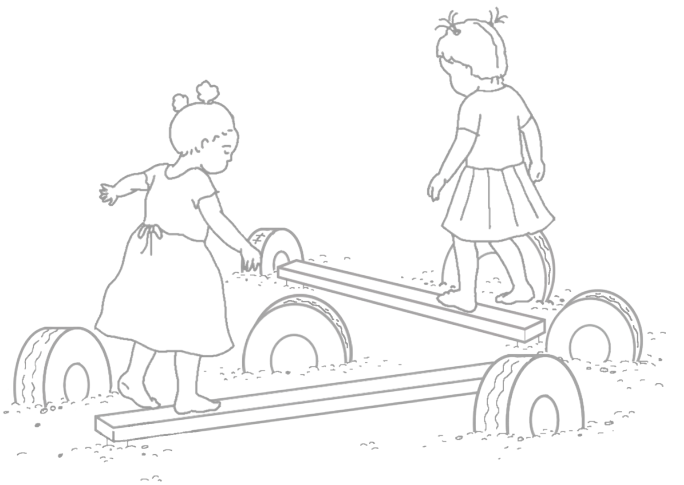


11.

Anandmay Adhigam [Joyful Learning]: Play Pedagogy of Mobile Creches' Early Childhood Education Curriculum

Chavi Vohra and Deepshikha Singh

Abstract

The purpose of this article is to highlight the significance of a comprehensive play-based learning approach in early childhood education and the need to integrate play and learning to provide meaningful and enjoyable learning experiences to young children. The article describes a play-based thematic curriculum approach of Mobile Creches' ECE curriculum called *Anandmay Adhigam*. It talks about the use of play pedagogy to achieve the curriculum objectives and emphasises integrated learning in early years across different developmental domains and subject areas. The article describes the context of young children in marginalised settings as active learners, the curriculum content based on age and stage appropriate standards, varied play-based pedagogical techniques used by *Balwadi* teachers (preschool teachers for 3-5 years old children), and the organisation of learning environment and low-cost developmentally appropriate play materials to transact the curriculum. It discusses the thematic approach of the curriculum and details out the use of themes as common threads to provide a range of authentic learning experiences to young children. Different examples of learning experiences are provided in which play is embedded around various themes familiar to children's daily life context. The curriculum provides a focus on developing young children's social-emotional and adaptive skills using play-based techniques for them to thrive now and in the future.

The Context

Mobile Creches (MC) works for the early childhood development of young children from marginalised families at worksites (such as construction sites, brick kilns, tea gardens, factories, and mineral grinding units), informal urban settlements, and

remote rural and tribal settings of India. Children belonging to these families are exposed to adversities because of poor housing conditions, lack of food, clothes, hygiene, care, and poor learning opportunities. Their parents are not educated, they do not get an appropriate learning environment at home, and they are more likely unable to access quality preschool education which causes an irreversible damage to their human potential (Jain & Singh, 2021; Mishra, Sarathy, & Rao, 2022). In alignment with SDG-4 (Sustainable Development Goals), Target 4.2 to provide universal access to quality early childhood development, care, and preschool education by 2030, MC prioritises these underprivileged children who face early disadvantages because of poverty and migration (Habib, 2022).

Anandmay Adhigam: An ECE Intervention of Mobile Creches

Since early years learning has larger impacts on subsequent education and lifetime wellbeing, MC believes that quality preschool education is of highest value for the underprivileged children. MC has developed an early learning intervention called Anandmay Adhigam [Joyful Learning], a developmentally appropriate Balwadi (preschool) curriculum for children in 3–5-year age group. Anandmay Adhigam is a domain-based curriculum that strives to improve the quality of early learning experiences for young children with a focus on developing children's social, emotional, and adaptive capacities as well as their early literacy and numeracy skills. The aim is to unlock children's full potential and preparing them to face world's complexities and lead a productive life in the future. The curriculum is carefully designed in consultation with ECE professionals and subject experts. It believes in the transformative power of play in shaping the substantial brain development and advancing children's intellectual and creative talents in their formative years to support the future cycles of learning.

Picture 1: Anandmay Adhigam, A Balwadi curriculum

The curriculum adheres to the principles that young children learn through exploring, observing, interacting, imagining, experimenting, making, and reflecting. The curriculum is based on active principles of play pedagogy to transact the curricular content and experiences. By means of play pedagogy, the curriculum brings the outer world

experiences into ECE classroom and creates an *Anandmay* (joyful) learning experience for children. Young children understand a concept effectively when it is relatable to authentic experiences in their immediate environment and therefore, the curriculum follows the principle of transitioning from concrete to abstract. Children are provided opportunities for experiential learning through concrete experiences from hands-on activities in real life settings. This shapes the pathway for an abstract reasoning. For instance, teaching mathematics begins from concrete and moves to generalisations/ abstraction. Teacher begins teaching early math concepts through connecting it with real-life experiences. Children develop number sense and perform mathematical operations through games and use objects like stones, beads, sticks etc. and gradually progress to understand abstract symbols of numbers. The curriculum adheres to the principle of progressing from simple to complex. Children thrive when presented with more challenging tasks beyond their current mastery level. They are given opportunities for constructing and reconstructing their knowledge by connecting with their prior knowledge. Whether it is language development, problem-solving, or creative expression, the curriculum unfolds in progression, guiding children through successive levels of complexity at their own pace.

Curriculum content and learning experiences are personalised to respond to the diverse needs arising from social, cultural, language, economic, geographical, and individual disadvantages. Over the years, play pedagogy of *Anandmay Adhigam* proved useful in reducing the disadvantages and deficits among children who are impacted by labour migration and informal employment of their parents.

Play Pedagogy of Anandmay Adhigam

Anandmay Adhigam adopts play pedagogy. Play is not merely seen as a means of recreation for children rather it is combined with learning experiences as an end. Learning experiences are planned across domains in form of developmentally appropriate play activities, interactive experiences, and collaborative actions nurturing an urge for children to learn. Play driven learning experiences provide opportunities for children to navigate the world around them, manipulate objects, make connections, and experience 'doing' and 'making'. Play acts as a medium to inspire their imagination, possibility thinking, construction, and creativity. Play activities entail learning objectives, these two go hand in hand, and children play to learn which is fun and educational at the same time (Samuelsson & Carlsson, 2008). Learning experiences are designed as a playful experience for children and that each play activity must develop some knowledge concept, skills, and dispositions for physical, cognitive, creative, language, social and emotional domains in an integrated manner.

Physical

Activities for physical development involve the domain of gross motor, fine motor, and body balance skills. For gross motor skills, experiences include outdoor and indoor activities such as clapping, walking and running on straight and zig-zag lines for balance, jumping inside and outside the shapes (circle), bending and turning, crawling, walking on tip toes, dancing to rhythm, exercising, throwing, kicking, and catching the ball. Children do activities by using a variety of materials to develop their fine

Picture 2: Children doing physical movements on a musical instrument 'Daphli'. Picture credit: Mobile Creches

motor skills such as colouring and tracing, tossing, lacing, open and shut, cutting and pasting, paper folding, playing dough, clay sculpting – rolling pounding, squeezing, shaping, and drawing shapes and objects. *Moti pirona* and *Phool patta pirona* are traditional activities in which children string the beads and flower petals. These activities develop their hand-eye coordination.

Cognitive

For cognitive development of children, the focus is on three larger domains. These are critical understanding, language development, and creative development. To enhance reasoning and critical skills, children are engaged in activities for patterns, relations, and geometry such as classification by colour, shape, and size. Teachers work to develop mathematical

Picture 3: Children engaged in block play. Picture credit: Mobile Creches

readiness such as number sense and operations by using objects, pictures, sound such as clapping, and real-life incidents. For example, children play number-clap game in which if teacher shows 'four' fingers, children will clap four times. They develop number sense by counting 5-10 objects such as stones, wood pieces, and leaves. After they have developed the idea of number quantification through concrete experiences, teacher proceeds with number recognition. Children work on simple comparisons and opposites such as based on concepts of big/small, dark/light, same/different, high/low, and fast/slow and understand spatial relationship such as inside/outside, above/below, front/back, over/under and measurement skills such as more/less, part/whole, and long/short. Children are engaged in problem solving through puzzles, maze, and analogies.

Language

To focus on language and literacy development, children's everyday life experiences relate to learning experiences, and these are implemented using techniques such as interactive storytelling. For example, children take great interest in stories, and they develop listening skills, comprehend and recall story sequence, answer simple questions on who, what, where, and why, and develop the concept of time such as before/after, now, soon, later and so on, and identify features of characters and understand their role. Teacher emphasises on vocabulary in storytelling. Children develop curiosity and their imagination takes a leap when they enact stories to express themselves. For emergent literacy skills, children are engaged in activities of phonetics and print awareness. For example, teacher facilitates children's familiarity with book reading by holding the book, reading from front to back, reading sentences from left to right, pointing at images and describing, and turning pages when the lesson is over.

Picture 4: Reading corner in one of the centres supported by Mobile Creches.
Picture credit: Deepshikha Singh

Picture 5: Print rich environment - hand-made posters of animal and fruit themed poem. Picture Credit: Mobile Creches

Picture 6: Hand-made posters based on tree and plant themed poem. Story flashcard – Sona aur Titli. Picture Credit: Mobile Creches

Classroom environment is print rich so that children learn identifying letters and other symbols. Walls are displayed with symbols/language such as alphabets, poems, song posters, math and science concepts with images, birthday wishes, daily schedule, and good habits posters. Teacher introduces the letters and words to children by showing them concrete objects such as flowers, stones, etc., then writing the related letters and words on board, and engaging children in connected real-life conversations.

In this way, children understand the symbolic meanings of letter and words. Children develop phonological awareness by practicing the sound of letters and words. Teacher says a sentence and children clap for each word spoken. They play games based on riddles, rhymes, homonyms, and tongue twisters. They are shown flash cards, they name and describe the pictures and engage in free conversations. Stories had been useful in gaining children's attention, developing new vocabulary, attentive listening skills, and fostering imagination. Group singing and chanting in mother tongue allow children to comprehend and provide meanings to the world around them.

Creative

For creative development, children are provided opportunities to engage in arts and craft. Children create origami from coloured papers, drawings using crayons, wall paintings using paints, do craft projects from cutting and pasting papers and using local and biodegradable materials like flowers, petals, roots, nut shells, and sticks. Children are engaged in music and movements which allow them to express themselves creatively Examples of such activities include Chutki Bajao (a clapping game) and Rhyme with walk (walking while reciting rhymes).

Picture 7: Children doing wall painting on the outer walls of Balwadi centre. Picture Credit: Mobile Creches

Children do simple stretches and body movements. They do action songs which involve movements like clapping rhythmically and tiptoe to the beat, movement exploration in which children are encouraged to move in different styles (e.g., dancing, walking, parading, tramping) in response to music, group dance in which they perform on events and festivals like Independence Day, Republic Day, Children's Day, Holi, Eid, etc. They dance freely to music and express their moods and feelings uniquely.

Picture 8: Children doing stretch exercises guided by Balwadi teacher. Picture Credit: Mobile Creches

Social and Emotional

At the organisation level, social-emotional capacities are prioritised. This is not limited to building the social-emotional capacities of children but to that of the entire organisation at the ecosystem level (Vohra, et. al., 2024). More recently, the Balwadi curriculum was upgraded to provide an increased focus on social-emotional learning experiences for young children. It was realised that children belonging to disadvantaged groups are the ones who would benefit most from developing adaptive and independent life skills. Teachers focus on developing children's self-regulation skills. For example, children learn to take turns, raise hands to speak, arrange their footwear, stand in queue and wait patiently to wash hands. They learn to recognise, accept, and manage their emotions positively. For example, if a child is angry in a play situation and hits another child, teacher takes the discussion before the whole class and talks about the emotion of anger, what happens when one fails to manage their anger, how do they feel when they harm others? Whether hitting or harming others gives us a good feeling or a bad feeling and makes children understand that anger is valid but how to manage the impulse positively? Children understand the concept of 'self' and label emotions through pictures, drawings, and facial expressions. Children also engage with arts and crafts for self-expression which has therapeutic benefits.

With simple strategies such as games in circle time, drawing, problem-solving activities and stories, children learn negotiation skills, asserting themselves, learning acceptable social behaviours, practicing empathy, and developing positive relationships. Stories have been useful in developing early awareness of human differences and inclusion. Children learn to challenge norms inspired by characters who represent the ideas of acceptance, tolerance, friendships, helping others, and making responsible choices. Children play games which demand teamwork and collaboration.

***Bal Sabha:* An initiative for social and emotional learning**

Bal Sabha is a child-led group activity facilitated by Balwadi teacher. It is a platform for children to develop their confidence, leadership qualities, decision-making skills through constructive dialogue. Children assume the roles such as *Adhyaksha* (chairperson), and *Up-adhyaksha* (vice chairperson) to guide discussions with peers on specific agenda. For instance, the agenda could be developing a safe space within the Balwadi classroom for social-emotional learning and developing ideas on gratitude, kindness, compassion, and forgiveness. Children are provided space to communicate their thoughts and feelings and listening to their peers. In these discussions, Balwadi teacher scaffolds the activity through enabling dialogue and encouraging questions and interaction. She focuses on developing care dispositions among children by encouraging them to share toys, take turns, resolve conflict, help others, and demonstrate sensitivity for others. Children engage in topics of environmental consciousness such as caring for plants and animals, saving water, recycling, hygiene and cleanliness. They perform role play by acting out different roles in simulated panic situations which help them understand and practice appropriate response to emergencies. Children learn about environmental hazards and safety measures, developing preparedness skills against environmental hazards. Other agenda includes social and democratic values. Children perform role play on topics of pro-social behaviours and good citizenship such as acceptance, tolerance, and they express themselves dramatically. Puppets are used to tell stories which make it interesting for children to learn social and democratic values and complex emotions. Children dance on theme-based songs and celebrate special occasions and festivals together. This develops the sense of belonging and inclusion.

Picture 9: Children doing role play in Bal Sabha session on Theme – Me, My Family, My Home. Picture Credit: Mobile Creches

In Bal Sabha, the teacher initiates discussion by selecting an object of interest such as a doll or puppet to encourage children's participation. Using pictures,

poems, songs, and stories, teacher initiates the theme of discussion and engages children through interesting questions. For example, questions like 'How was your day yesterday?', 'What did you do after getting up and before going to bed?', 'What is your favourite food, colour, game, and person? 'What do you see on the way to school?' Bal Sabha initiative is designed to provide opportunities for children to practice communication and metacommunication skills such as listening attentively, contacting, informing, explaining, expressing, mutual understanding, demonstrating, expecting, and articulating. Bal Sabha sessions are integrated into the curriculum and take place once a week. However, the overall social-emotional learning experiences are tied to everyday classroom experiences.

Theme-based curriculum approach

Anandmay Adhigam is based on Thematic curriculum approach that contains a set of 9 age-appropriate themes for children in 3-5 years age group. The nine themes are Me, My Family, and My Home; Animals and Birds; Water; Plants, Trees, and Environment; Vegetables; Fruits; Weather; Our Occupations; and Modes of Transport. Themes are broad ideas within which diverse domain-based and subject/discipline specific learning experiences (lesson plans) are planned such as science, maths, literature, social science, and environment across cognitive, social, emotional, physical, aesthetic and creative domains. The transaction of each theme is progressive adhering to three fundamental principles of learning i.e., moving from simple to complex (*saral se kathin*), concrete to abstract (*pratyaksh se apratyaksh*), self-experience (*swayam se anubhav karke*).

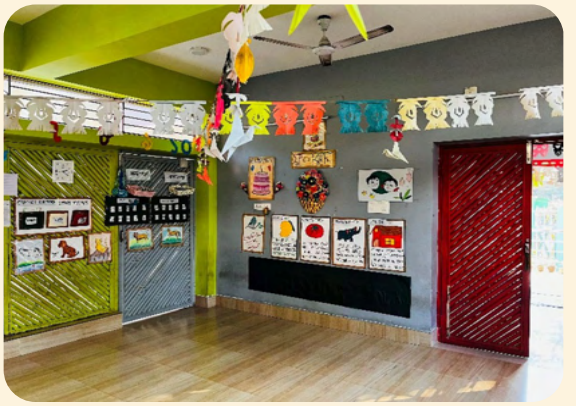
Theme-based Lesson Plan [Water]

Below are given examples of how the themes are transacted:

Let us take an example of the lesson plan for theme 'Water'. In Balwadi, the day starts at 9:00 am. Children do exercise, prayer, and have meals followed by the circle time. Learning experiences for the day are planned around the theme of 'water'. From 10:00-10:30, first activity is conducted aimed at developing language (communication) skills. Teacher asks questions related to water, its use for food and beverage preparation, its use for keeping our bodies clean and hygienic, and other uses of water. She offers structure to the discussion. She encourages children to think and observe how water is used in their homes and how it is stored. Fron 10:30-11:00, second activity is conducted based on

language. The teacher uses a poem on water "*Paani bin chale na kaam...*". Children have the recess from 11:00-11:15 am for getting refreshed.

From 11:15-11:45 am, third activity is conducted which is based on gross motor and fine motor skills. This is integrated with social and emotional domain. Children are engaged in water play '*Kya doobta hai kya terta hai*' that encourages curiosity and observation skills. Children play with water-filled tubs and buckets outside the classroom. They splash, sink and float objects. They share their water play experiences with friends and teacher.



Picture 10: Child-friendly print rich learning environment in one of the centres supported by Mobile Creches. Picture Credit:Deepshikha Singh.

From 11:45-12:15 pm, fourth activity is conducted which is based on cognitive skills such as colour identification and classification. Teacher shows a glass full of water and asks children to talk about the colour of water. Teacher shows white, red, blue, and green colour cards and asks children if the colour of water looks like any of these. Children provide different responses. Teacher concludes that none of the colour is same as that of water because water is colourless. Children break for lunch from 12:15-1:00 pm and eat hot-cooked meals. They take a nap from 1:00-2:00 pm.

From 2:00-3:00 pm, fifth activity takes place in which teacher arranges the learning materials and toys across different developmental domains and children are free to choose according to their interests. Teacher supports children's activities through scaffolding techniques such as enabling dialogue, providing verbal cues, asking questions, demonstrating, and repeating. From 3:00-3:30 pm, sixth activity is conducted based on social-emotional learning and creative expressions. Children collaborate to make a collage by cutting and pasting and drawing images related to water. From 3:45-4:10 pm, seventh activity is conducted based on integrated experiences of early literacy, communication, and social-emotional development through print awareness and storytelling. Children select books that interest them. Teacher points at pictures in the book and

encourages children to create/tell a story around it. This is followed by teacher telling a story of their interest. From 4:10-4:30 pm, eighth activity is conducted based on physical development. Children dance on a theme-based song of water 'Neela neela ambar hai neela neela paani...' From 4:30-4:45 pm, ninth activity takes place which is the recapitulation of overall learning experiences in a day and reflection on children's learning. Children are provided evening snacks, and they leave for home at 5 pm.

Organisation of learning environment and materials

Picture 11: Posters on colour and letter recognition based on real-life examples. Early math concepts of small/big and above/below displayed. Picture Credit: Mobile Creches.

The Balwadi setting is arranged in learning corners for domain-specific play activities. These include corner for house play where children play 'house' "ghar ghar khel" where they mimic household activities and family roles using dolls, kitchenware, and other domestic toys. In arts and creativity corner, children use different materials and develop craft projects. Reading corner is used to display storybooks, picture books, poems, and flashcards.

There is a manipulative and construction corner to explore materials and objects and intellectual play such as block construction. There is a sand play corner, and a water play corner. The classroom has a dedicated imagination corner where children get opportunity for self-expressions through a variety of play situations such as dramatic or pretend play. They play "*Aaj hum guda gudiya bazar jayenge*" (Today we will go to the toy market), indicating their imaginative play where they pretend to shop for toys. They imitate animals by walking like them "*janwaro ki chal me chalana*" and creating stories "*fal sabji ke mask or kahani banana*" and "*Aapko bhook lagi hai, uppar khana rakha hai*" (Are you hungry? The food is kept upstairs) where children pretend to be hungry and look for food. Group or one-to-one activity such as "*Mai kaun hoon?*" (Who am I?) where children take on different

roles or identities. Children also have a social-emotional corner used for doing self-awareness activities, understanding emotions of self and others, and for resting and relaxing if children need a break or are feeling low.

A wide range of developmentally appropriate low-cost play materials and toys made by creche workers and Balwadi teachers are arranged in the learning corners such as handmade stuffed dolls, cloth balls, mobile toys, stack toys, wooden cartwheels, puzzles, wooden blocks, indigenous dolls, clay, sand tray, paper folds, board games, ropes, strings, beads, crayons, paints, pen, glitters, storybooks, picture books, flash cards, posters, object miniatures, musical instruments, balls, dramatic/pretend play sets – kitchen sets, medical sets, etc. Locally available raw materials such as flower petals, twig, grass, leaves, sticks, sand, soil, mud, cereals, etc., are used to provide sensory experience of texture. Using the play materials, children engage in theme-based play such as block construction, clay making, sand and water play, pretend play using objects and figures such as house play, dramatic play based on animals, humans, and imaginary characters, sketching, drawing, colouring, painting, and making crafts. The teacher encourages the children to manipulate the objects, explore objects' properties and functions on their own, and construct and create using their imagination. Children's learning is assessed through observations in their daily activities and maintaining a portfolio of their work.

Picture 12: Children playing in group in different learning corners. Picture Credit: Deepshikha Singh.

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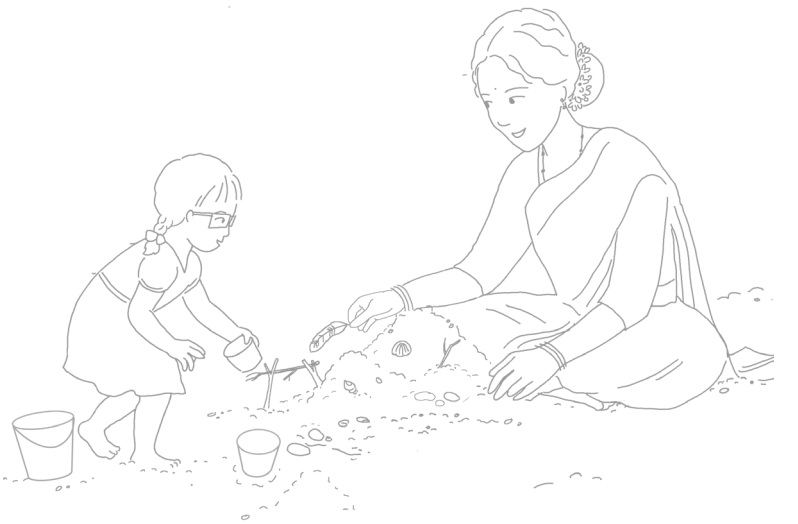

12.

Supporting Quality Early Childhood Education in Anganwadis of Karnataka through a Play-Based Learning Approach: A Collaborative Effort with the Government

Chitkalamba N.

Abstract

Education during early childhood years builds the foundation for all future learning. Young children learn best while they are playing. Quality indicators of the Early Childhood Education (ECE) curriculum include play-based learning that facilitates the holistic development of children. However, for a long time, experts in the area have raised quality concerns about the pedagogy, and inadequacy of professional capacity building in the country. Public service systems, like the Integrated Child Development Services (ICDS) which caters to the majority of children from disadvantaged backgrounds, are more at a disadvantage. Emphasis and efforts to improve have been ongoing since the National Education Policy 1986 (NEP) to the 11th and 12th five-year plan to the National Curriculum Framework (NCF) 2005, the National Policy of ECCE (2013) and NEP 2020. A large-scale intervention was undertaken in Karnataka to address the quality concerns of ECE in the ICDS Anganwadi centres (AWCs) in improving the curriculum and capacity building of ICDS functionaries in the seven districts of the northeast region called Kalyana Karnataka covering 13000+ AWCs under 46 ICDS projects. The current paper discusses the nuances of play as a pedagogy and the process of enriching the ECE curriculum and highlights the visible changes on the ground.

Play

Play is an essential part of early childhood development. It is through play that children begin to engage and interact with the world around them, while being able to create and explore the world they can master and conquer their fears and develop new competencies as they expand allowing for enhanced confidence and resilience (Ginsburg, 2007).

Play comes in different types and contexts, and it affects and is affected by each area of development: physical, cognitive, creative, social-emotional, and linguistic (Pellegrini, 2011). So, when children are playing, they are building their knowledge, skills, and attitudes for lifelong learning.

Treasure (2018) provides a consolidation framework of different types of play namely Construction play, rough and tumble, large-motor, small-motor, socio-dramatic play, exploration play, role play, social play, language play, symbolic play, mastery play, recapitulative play, and digital play. The author cites, "Play does not stay neatly encapsulated within these different compartments but, according to Miller and Almon (2009), knowing and watching for the broad types helps educators to understand how children play and what their play looks like. These types also help educators to consider whether they are providing adequate opportunity and materials for all of the types of play".

Play as pedagogy

Play is considered an inseparable part of learning. While children learn when they play, they learn to play. It is seen as both a context for learning and a pedagogical practice.

Play as pedagogy is believed to create a non-threatening classroom environment allowing children to express themselves freely which helps build strong relationships between teacher and learners. It increases opportunities for various competencies to develop. Play-based learning allows flexibility for learners and enables teachers to understand the children, their backgrounds, and interests and meet the needs of the learners.

While true play (free play) which is natural and spontaneous for children is highly beneficial for development, learning through play (guided play) is also considered critical to maximising benefits, especially at the time when the curriculum framework aims to attain defined competencies to support school readiness in children. Scientific evidence suggests that a combination of free play and guided play, and attention to both children's academic and social development, is the most effective approach and is linked to better achievement outcomes (The Education Hub, 2019). All areas of academic learning can and should be incorporated into play for early

learners. As children grow and develop the nature of play also changes based on their understanding and experiences of the world around them. It is essential that play designed for learning should cater to the developmental needs of children. Ensuring a continuum in play-based learning from child-initiated play to guided play to adult-led play becomes essential in the ECE curriculum.

ECE in the context

Most preschool-aged children in India access early childhood care and education (ECCE) services through the government-run ICDS programme, which provides six different services, including supplementary nutrition, preschool education, healthcare immunisation, health check-up and referral services. The Anganwadi centres (AWC) run by ICDS are more prepared to provide services focused on health and nutrition-related aspects, and far less prepared to provide education/preschool services. The research and field experiences show that it is the quality of preschool programme and not only access that affects the developmental outcomes. More than 80 % of children between 3 to 6 are attending some or the other ECE programme the quality of these programmes in terms of their effectiveness for children is open to question.

The IECE study (Kaul et al. 2017) found that cognitive competencies assessed for children at age 5 were very low and it was found associated with the quality of preschool they were exposed to. The classroom observations indicated the pedagogy to be dominated by formal teaching of alphabets and numbers through rote and repetitive methods. The comparison of a subsample of children going to private ECE centres, in the same study, showed that the children from less privileged families had a much lower scale at the baseline, who/and when exposed to an innovative ECE centre caught up with their more privileged peers by the end of one year. The findings highlight the need to prioritise good quality ECE for children from marginalised groups to mitigate any cognitive deficit they have acquired in their early years. From the viewpoint of policy and advocacy therefore it is extremely important that the children especially those from disadvantaged backgrounds are exposed to a stimulating home environment as well as good quality centre-based ECCE.

The critical issue here is what is a suitable method for providing quality preschool education to the children. There is a consensus that play-based teaching is ideal for children in early childhood. In India, efforts have been made to develop an appropriate curriculum based on play way methods and study the efficacy in real-life situations. The search for an ECE curriculum suitable for a large-scale programme like ICDS is ongoing in different parts of the country.

The northeastern region of Karnataka also known as Kalyana Karnataka comprises 7 districts that rank lowest in the state human development indices (HDI). The area also includes 2 aspirational districts viz., Raichur and Yadgir. An intervention in ECE

was initiated in 2011 in Yadgir block to address the quality concerns in implementation and gradually the efforts also began to enhance the curriculum to the required needs. The state Government body, Kalyana Karnataka Region Development Board (KKRDB) in 2017 recognised the programme's benefits and deemed it imperative to implement it across the region's districts.

An assessment of the ECE programme conducted in the Anganwadi centres in all 7 districts of the region was carried out in 2018 during which a full day (4 hours) of classroom observation about the transaction of ECE in 628 centres was conducted. It was found that the majority (80%) of centres conducted less than an hour to one hour of ECE. Also, many centres used rote (56%) as a learning method, and another 27% did not provide any learning opportunities. Also, the teaching of formal reading, writing and numbers was observed in 57.7% with many centres (52%) conducting the activity without using materials. The lack of adequate Teaching learning materials (TLMS) was also seen in most centres (92%).

Common method of conducting activities during baseline

The ECE strengthening programme

Given the context, it was imperative to address the concerns in the curriculum and capacity building of the ICDS functionaries. The Central Advisory Board of Education (CABE) recommended that the ECCE curriculum should be developmentally appropriate and have a school readiness component as learning at this stage should be per children's interests and developmental priorities (MHRD, 2013). The processes of enhancing the curriculum to suit the play-based pedagogy are presented below.

Curriculum

Karnataka was one of the early states to bring out a curriculum for ECE activities in Anganwadi centres with a few revisions from time to time until 2011 being the latest.

A weekly theme-based resource bank, *chili-pili*, consisting of suggested activities, songs, stories, games, creative and cognitive under 43 themes, was provided to AWCs for use. However, with the growing understanding of child development and early learning, a revision was needed to meet the recommendations of the NCF 2005 and subsequently the National ECCE policy and the National ECCE curriculum framework (2013) by the MWCD. The improvements required were identified in the following four broad areas:

Age / developmental appropriateness: AWCs being a multi-age group classroom the activities, especially under the cognitive skills (with early math concepts covered under it) did not adequately address the abilities of different age groups. The activities were common for children.

Appropriateness of themes: keeping the low resource setting in mind (of the ECE facilitator -AWW, PLMs and the age of children and background from which they come) and the experiences from the field engagement three observations were felt necessary to consider:

First, a few themes did not suit to be as themes, especially for the week-long duration, for example, notes and coins, places of worship, and national celebrations. When the experience of children are considered, such themes and others like musical instruments, and entertainment devices did not offer much to engage children for a week.

Second, concepts like senses, sizes, shapes, and weights are themes in December and colours is a theme in January. Such placements delayed the opportunities to learn the basic concepts.

While the above concerns could be well handled by a professionally trained facilitator the same cannot be true in the case of the AWWs given their educational background and capacity building received.

Number of activities: The pool of activities provided for most themes was insufficient to cover the various aspects of a given theme during the week. As a result, the workers have a shortage of the same, and being novel is a weak chance owing to the lack of inputs and exposure

Developmental domains: The activity bank did not cover a wide range of abilities that are to be fostered in different domains of development, for instance, progressive levels of cognitive skills and mathematical concepts, operating with numbers; opportunities to use language skills; exposure to print and phonemic awareness.

A workshop conducted in collaboration with state DWCD and UNICEF in 2022 which comprised a thinking group of supervisors and Anganwadi workers identified from

different regions of the state resonated with the above observations and expressed the need for modifications and related training.

A play-based learning environment must encourage children to see themselves as communicators, readers, writers, and thinkers. children are given opportunities to make predictions and generalisations about their world, use patterns and symbols, and experiment to find out why things happen. This helps children make connections between experiences, concepts, and processes. It also supports children to accept responsibility, adapt to change and work independently and with others. Researchers have provided a conceptual framework of five characteristics that define activities for playful learning viz., joyful, meaningful, actively engaging, iterative and socially interactive (Zosh et al., 2017). The inputs to enhance the scope of the *chili-pili* curriculum include the following:

- **New Inclusions added to the existing *chili-pili* curriculum** to make it more holistic catering to all areas of development. The important inclusions include-

  Free play activities that did not find a place in the existing chili pili curriculum, was included with various play corners arranged in the classroom and a specific time slot (30 minutes) was provided every day.

  Language and Emergent literacy activities were added to facilitate the development of skills like listening, comprehension, expression, description, vocabulary building and orientation to print through various activities. A combination of whole language and sound approaches to emergent literacy opportunities are provided in specified time slots.

  Early Mathematics, which includes an understanding of basic concepts, meaningful counting and understanding of numeral systems for different age groups were added as additional elements to the existing curriculum.

  Other new sessions include a calendar and weather chart activity, attendance activity, classroom rules, music and movement and a daily recap of the activities carried out in the day.

- **Strengthening existing activities of the *chili pili*** to allow for more advanced concepts to build on simpler ones introduced earlier in the curriculum. Important in this are:

  a. **Cognitive activities** to support various thinking skills are included for sensorial experiences, perceptual awareness of concepts like texture, sound etc., and general environmental awareness.

b. **Games** in the original curriculum had activities where few were sedentary and some cognitive in nature. More action-oriented games that allow for the exercising of large muscles were included.

- **Improved delivery of existing activities** regularly carried out in the AWC.

  a. **Prayers** are modified to make them easy to understand, rooted in the child's environment and secular.

  b. **Action songs** which formed a large percentage of the day's activities have been rationalised and reduced to allow time for other activities, allowing for a mix of old and new rhymes thus facilitating frequent revision of rhymes and helping build better recall.

  c. **Creative activities** have been rearranged to make them less cognitive and encourage spontaneous work. The nature of activities is fixed for each day of the week to ensure they are carried out with equal emphasis on the different activities. Group artwork is included to provide a collaborative experience.

- **Improved classroom organisation and time management** are affected through

  a. **Classroom arrangement** is reorganised to ensure maximum available space is utilised for children, ensure that all visual aids are at the eye level of the child and the availability and access to PLMs improved through categorisation, labelling, improved storage, and arrangement. Inputs on display, use of communicative labels, and children's art are also included.

  b. **Time management** is central to the reorganisation process and is affected by allowing time for a larger number of activities in the day, with specific slots for different activities, and allowing time for age-specific activities. This is done by allowing time for large group activities conducted with all children and smaller group activities that call for eclectic and age-specific group work.

Structure and management

The curriculum adopts a mixed approach with thematic and non-thematic days planned for about 20 days in a month. The themes and their duration are rationalised based on what is more relatable to children and their experiences which include the natural/biological world (covering themes of animals, fruits, vegetables, and food) the physical world (covering themes of water, air, season, sun, moon, day and night) and the social world (covering themes myself, family, transport, neighbourhood, community helpers, etc.). Examples of big themes include me and my family, vegetables and fruits, domestic animals, clothes, and vehicles spanning 6-10 days

while smaller themes include wild animals, agriculture, and seasons spanning about 3-5 days. Festivals are celebrated /observed during the event in the calendar. On average, about 10 days are focused on the theme and the remaining days cover general activities. Activities during both cycles cover cognitive, early maths, language and emergent literacy components.

Table 1: Rhythm of the day

Duration in minutes*	**Activity slot**					
		Day 1	Day 2	Day 3	Day 4	Day 5
	Setting up the classroom, Children's arrival, monitoring of hygiene					
30	Free play in different corners			Corner 1: Corner 2: Corner 3: Corner 4: Corner 5:		
20	Prayer, Milk distribution, Attendance					
15	AWC Rules, Calendar and weather					
10	Free/theme conversation,					
10	Rhymes and songs,					
10	Word and counting game					
15	Snack time					
30	Cognitive/ Preparation for Math/ Emergent literacy (in younger and older groups each day)					

15	Physical games/ music, and movement					
20	Spoken language/ emergent literacy (in younger and older groups on specified days)					
30	Art time					
30	Lunch					
10	Recap of the day					

**The duration specified is an approximate time required for conducting the planned activity, considering the scope of the activity and the interest of the children*

The curriculum aims to achieve 4 hours (240 minutes) of ECE activities per day of which 3 hours (180 mins) include planned activities and 1 hour (60 mins) is left for the conduct of routine activities. Normally the average time spent on various activities in different organisational structures looks like this:

- Whole group activities occupy slots of 90 minutes and include activities such as Free play, Name cards, weather & calendar, Action songs, Free/guided talk, sound and word games and counting, oral language, Games and Recap of the day's activities. And 60 minutes for routine activities.
- Small groups with mixed-age activities are conducted for about 60 minutes per day and include Free play and Creative art with opportunities for individual work.
- The group based activities for the two different age groups are conducted for 30 minutes daily, including Cognitive, Early Mathematics and Emergent literacy activities. On specified days these concepts are planned for 50 minutes.

Capacity building

The need for adequate and quality training of ECE functionaries has been emphasised for quite some time (NIPCCD 2010, CECED 2010). To support the implementation of the ECE programme capacity-building workshops and training are conducted at

all levels of functionaries of the 46 ICDS project- CDPOs, Supervisors, Anganwadi workers and helpers in the 7 districts of the region comprising about 13000+ Anganwadi. The training inputs focus on academic activities to foster different abilities, child development aspects, mentoring and monitoring techniques.

Training of AWWs by supervisors

A third-party mid-line assessment conducted in 2022 (after the pandemic gap) showed that 73% of AWCs conducted planned ECE for 2-3 hours, 58% of AWCs organised free play, 44% had adequate and variety of TLMs with complete organisation (43%) and 58% provided multiple learning opportunities.

Voices from the field

I have realised that children bring with them abundant knowledge and skills. Had never imagined that play could be created in many ways to bring all that out. I used to do a few activities that I could understand from chili-pili but it was more one-way. The detailed description of the activity procedures provided has now helped me process them in an engaging and challenging way. The free play time works magic. It offers learning in multiple modes and what I like the most is that children decide what they want to play. (Smt. Vasantha, AWW, Gajapura-B, Vijayanagara district)

Children in free play

I knew that children love to play but not that it is how they learn. All we focused on was songs, telling a few stories and some games. We did not know that such activities too could be made resourceful. Children like it when their favourite song is read to them, curious to see how it is written, think to find meaning and define words in it. They have fun while discussing over it. We adults have a bigger role to play in children's play. Looking back now I feel that I lost 14 years and so many children missed such opportunities. (Smt. Savithramma HM, Supervisor, Hakkandi Circle, Vijayanagara district)

Children did not come to the centre on time earlier, and many were not regular. Their attention was low. I realised now that what and how we taught not inviting to children. Now they stay full day. I am seeing a lot of involvement during the cognitive and creative activities. I feel so good. (Smt. Manjula, AWW, Halesagara AWC, Shahpura Taluk, Yadgir district)

Engaged in cognitive and art activities

Classroom observation

Herooru AWC-5, Koppala district

The teacher was doing a read-aloud from the book "*Nandini elliddale*"? (Where is Nandini?). While she read, she was discussing with the children showing the pictures where she described, 'as they searched for Nandini in the field, they saw footprints on the wet mud'. A child asked her, 'Had it rained the previous day teacher'?. The AWW replied, 'It might have'. The point that the child tried to link the story piece to real experience and then stopped and asked a question to the teacher gave a glimpse of the encouraging environment that play-based learning creates.

Mandalagiri AWC-3, Koppala district

With a glass of water kept before the children and holding a spoon of sugar the teacher asked

T: 'What would happen if sugar is put in the water?'.

C: 'Sharbat' (Juice).

T: Does it become juice just by adding sugar?

C: Need to add lemon.

T: Okay. Have you seen it made at your home?

C: Yes, yes

T: Look what I do now (Adds sugar into the glass and Stirs)

C: Stirring

T: What would happen to sugar?

C: Silence

T: Continues to stir and asks, 'looks what is happening to sugar?'

C: It is becoming less.

T: Is the size of sugar granules the same?

C: It is getting tiny

T: So, what is happening? ... sugar is dissolving in the water. Tell, me what is happening to sugar.

C: It is dissolving.

.....

.....

later....

T: What happens when you put sugar into the mouth?

C: Sweet

T: Laughs..... 'okay'. Yes, it does taste sweet.

Conclusion

Play is central to achieving a child-centred classroom. The current efforts in the northeastern region of Karnataka aimed at enhancing the quality of the content and facilitation method in the purview of play-based learning in ECE where the teacher provides scaffolding to children in learning new things and concepts. The learnings from the programme show positive signs of bringing quality to the curriculum and its delivery at low-resource settings like AWCs with planned capacity-building indicating the need for investment in the area which is of high importance.

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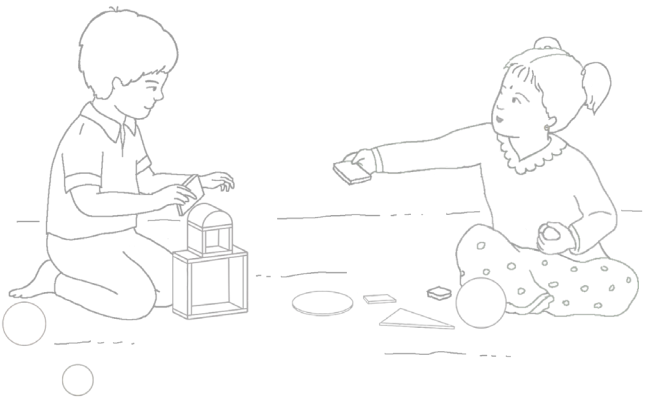


13.

An Observation and Analysis of Play in the Pre-primary Classrooms in Affordable Private Schools

Vidya Shukla, Manasa Ujjini C S and Anjali Govindankutty

Abstract

Play in the early years is crucial for holistic child development, offering multi-sensorial learning that enhances outcomes. Children exposed to play early on perform better academically, secure stable jobs, and have healthier relationships as adults. In urban India, 6.2 million low-income children need Early Childhood Education (ECE), with 86% attending Affordable Private Schools (APS) for better education. However, APS learning outcomes are poor, necessitating research into pre-primary settings to establish effective guidelines and regulations.

Key Education Foundation's School Readiness Program (SRP) uses a three-pronged approach to promote play-based learning in APS by engaging parents, teachers, and schools. We provide year-round training and coaching for teachers, resulting in consistent improvements in knowledge, skills, and attitudes towards play-based learning across 50 schools. Our data showcases these improvements and presents strategies for integrating Play Pedagogy per the National Curriculum Framework (NCF-FS, 2022). We also identify challenges and barriers in APS classrooms. This work aims to help ECE organisations and schools better support age-appropriate learning for children.

Introduction: Early childhood education in affordable private schools

The Affordable Private School (APS) sector is rapidly growing in urban India, with even low-income families enrolling their children for English medium education from age 3. Approximately 9.4 million children are in pre-primary private schools [Department of School Education and Literacy, Government of India. 2022; Irfan, 2017], yet little is known about the quality of education. APS classrooms are small and cramped,

with teacher-student ratios of 1:30 to 1:45, poorly trained teachers, and limited play opportunities. As a result, children fall behind in development, with consistently poor early learning outcomes. Despite spending 4.4 hours a day, five days a week in preschool, learning is largely rote-based and authoritarian, mirroring higher grades [ASER, 2022].

Play in affordable private school

Play, both indoors and outdoors, is essential for early childhood development, fostering confidence, social skills, problem-solving, and world connection. In APS classrooms, however, play is often undervalued due to cultural and social factors, safety concerns, and inadequate resources. Playtime is limited, facilities are poor, and teachers and school leaders (SL) lack training on the benefits and facilitation of play, leading to a focus on rote learning. To align with India's National Curriculum Framework, it is crucial to overcome these barriers and adopt best practices that support play in early education [Sheridan, 2002; Ministry of Education, Government of India, 2021; FSG report, 2021].

Challenges with facilitating play in affordable private schools

Here, we have categorised 5 biggest barriers to play in the early years classroom that are commonly observed in most Affordable Private School.

Low knowledge, skills, and mindsets towards play

Pre-primary teachers in APSs often lack sufficient training in play-based learning, struggling with both its implementation and understanding its benefits. They face challenges in planning and contextualising play activities to meet children's needs for meaningful experiences. While they may use the terminology of activity-based learning, they have not fully embraced the culture of freedom and choice inherent in play. This disconnect between theoretical support and practical application is common in many developing countries.

Limited space for movement, and interaction during play

High Teacher-Pupil Ratios (TPR) and small classrooms with large benches restrict movement and interaction during play. The absence of dedicated activity areas further impedes children's engagement.

The NCERT guidelines [Guidelines for preschool, 2020] for preschool infrastructure recommends 35 square metres indoor space for a maximum of 25 children and 300 square metres outdoors. The average APS accommodates double the number of

children in half the space and outdoor areas that are safe for the pre-primary children rarely exist. Child friendly, stackable furniture, access to a carpet or durry and low baskets or shelves for toys and books which are all essential as per the guidelines are missing in over 85% of classrooms.

Limited time for play

Teachers encounter difficulties in establishing routines that incorporate adequate playtime. The prioritisation of curriculum completion, often emphasising formal structures such as copywriting and rote memorisation of tables (some common expectations from Grade 1 teachers) frequently results in inadequate time allocated for free-play, outdoor play and exploration [Marks-Tarlow, Terry, 2010; UN Committee on the Rights of the Child (CRC), 2013].

Limited resources

APSs often lack age-appropriate materials for indoor play. Issues such as non-purchase, poor maintenance, and inadequate storage for materials, coupled with the perception of expenses, hinder effective use. Additionally, creating interactive displays is deemed time-consuming.

Parental demand for formal learning

Parents, often influenced by limited information and societal pressures, frequently demand more emphasis on writing and homework [Rentzou, 2019]. School leadership, prioritising admissions, often caters to these demands rather than focusing on parental engagement and awareness-building.

To address these challenges, the School Readiness Program (SRP) by Key Education Foundation (KEF) incorporates strategies to promote play-based learning within affordable private schools. The following section will detail the strategies applied and tested in this program.

Enabling play in APS: Strategies for implementation

The pedagogical approaches applied in the School Readiness Program [School Readiness Program, 2019] have been rigorously tested and refined over the last 6 academic years in partnership with 50 Affordable Private Schools.

To enhance access to play in early years classrooms, the primary focus has been on enabling two key aspects: (1) Indoor and Outdoor Play; (2) A balance between Free play and Guided play opportunities.

The implementation strategies encompass the following key components:

Improve knowledge, skills and mindsets towards play of teachers and school leaders through training, coaching and ongoing conversations

- Teacher training: Early educators undergo pre-service and in-service training focused on learning through play and utilising diverse materials. They receive a comprehensive handbook (Teacher Handbook / Lesson Plan) with QR codes linking to videos of classroom activities. This resource aids teachers in visualising practices, reassessing their mindset, and effectively implementing activity-based learning. The table below outlines the objectives covered in the Play Pedagogy training.

Through Training on Play pedagogy, teachers will:			
Understand the importance of play in early years	Identify different ways children play	Understand the different types of play to conduct to make learning holistic	Learn how to conduct play time effectively using KEF curriculum

Table 1: Objectives covered in the Play Pedagogy training

Math ***Time: 30 - 40 minutes***

Objective	Materials Required	Worksheet Page Number	Video of classroom activity
Children will be able to identify, colour, trace and count the shape semi-circle.	Semi-circles from Aakar Parivar,the word 'semi-circle' for word-wall	Student Workbook V1 : Page 19	**Ganit mala Counting Practice** **Exploring a semi-circle**

NOTE: Watch the video **Exploring a semi-circle.**

Steps:

1.Put up a circle, triangle, square and rectangle on the board. Ask children to name the shapes and trace them all in the air

2. Say, "I am going to show you a new shape now". Show a semi-circle from Aakar Parivar and ask children if they know what this shape is called.

3. Tell children, "This shape is called Semi-circle. It is half of a circle". Trace your fingers on the outer edge of the shape

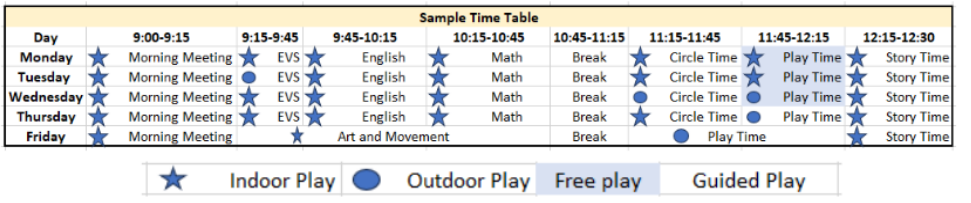
Picture 1: An activity-based Math lesson plan

- Teacher observation and coaching: Regular observations and coaching focused on key classroom quality aspects, including creating a conducive environment for play, effectively implementing activities and materials, managing classroom behaviour, and promoting student engagement. A 4-point scale rubric (APS Teacher Coaching Rubric) is used to systematically assess progress in these areas monthly.

- Involve School Leaders: As key decision-makers, School Leaders engage in monthly conversations to address classroom concerns and share play highlights. They also participate in classroom co-observations to witness early learning through play firsthand, helping to identify and address specific barriers faced by teachers.

Restructure daily routine to enhance playtime

The daily routine is restructured to increase time for both free and guided play, indoors and outdoors. This revised schedule promotes more interaction between adults and children, as well as between children themselves. Unlike traditional rote-based approaches that focus on a single subject all day, this routine incorporates a variety of activities to support diverse learning experiences.



Sample Time Table								
Day	9:00-9:15	9:15-9:45	9:45-10:15	10:15-10:45	10:45-11:15	11:15-11:45	11:45-12:15	12:15-12:30
Monday	Morning Meeting	EVS	English	Math	Break	Circle Time	Play Time	Story Time
Tuesday	Morning Meeting	EVS	English	Math	Break	Circle Time	Play Time	Story Time
Wednesday	Morning Meeting	EVS	English	Math	Break	Circle Time	Play Time	Story Time
Thursday	Morning Meeting	EVS	English	Math	Break	Circle Time	Play Time	Story Time
Friday	Morning Meeting		Art and Movement		Break	Play Time		Story Time

Picture 2: Sample weekly routine highlighting movement through diverse indoor and outdoor activities

Picture 3: A sample daily routine display used in classroom

Routine Component	Impact on Incorporation of Play
Play Time (Indoor Play)	Children work in small groups with Montessori-inspired materials and have dedicated access at least three times a week.
Play Time (Outdoor Play)	Children participate in structured outdoor play and whole-body movement at least twice a week.
Circle time	Children engage in shared activities and conversations to build social and emotional skills at least three times a week.
English, EVS and Math	Teaching incorporates TLMs like Ganit mala, blocks, and flash cards for guided, activity-based learning.
Story Time	Children participate in interactive storytelling facilitated by teachers using a 5-step process in large groups.
Art and Movement	Children engage in physical activities and art projects using local materials in small groups once a week for 2-3 hours.

Table 2: Components of daily routine in APS classrooms prescribed by KEF to incorporate play

Enrich the learning environment

Classrooms are equipped with a comprehensive TLM kit for supporting children's holistic development, used during both free and guided play. A TLM Manual is provided to help teachers integrate these resources effectively. Teachers are encouraged to create interactive displays and use teaching aids like learning corners and number strips. Schools must also allocate adequate storage space to ensure easy access for both teachers and children.

Picture 4: Teaching Learning Material Kit

Picture 5: Texture board, an interaction display used in classroom

Counsel schools to make indoor and outdoor space available for play and movement within their context

We counsel schools and teachers towards providing designated play spaces. Alternatively, if a separate space is unfeasible, encourage schools to modify classroom arrangements by replacing desks and benches with mats or child friendly furniture that is movable.

Picture 6: A seating arrangement that aids activity-based learning

Consistently engage parents to build awareness and generate buy-in for play as a primary form of learning

To foster awareness and gain parental support for play as a primary form of learning, we employ various strategic approaches:

- Workshops: Parents participate in three annual workshops to learn about the play-based approach, including guided school tours and interactive sessions on Teaching and Learning Materials (TLMs).
- Home Activities: Weekly worksheets with interactive activities help parents visualise play-based learning at home.
- Videos for Parents: CLAP (Children Learning Assisted by Parents) offers short videos via WhatsApp on how children learn through play and strategies for engaging them at home.

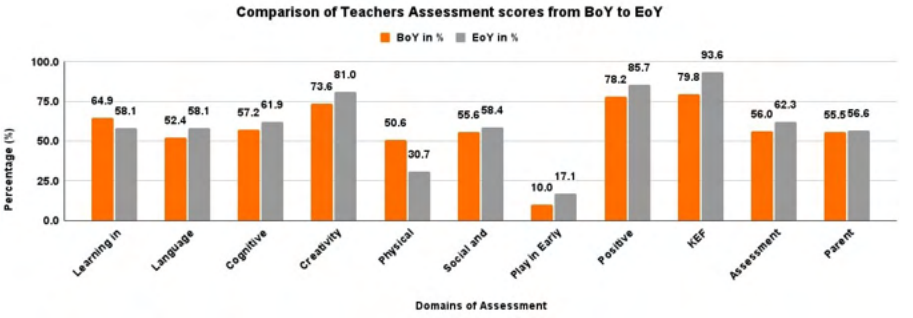
Learnings and insights

We have evidence that our revised play-based routine, teacher training, parent engagement, and in-house curriculum ensure holistic school readiness by age 6. This section presents outcomes and learnings from these strategies, observed during school visits and assessments with teachers. Qualitative shifts in school leader and parent mindsets were measured through conversations and surveys. Data was collected during the 2022-23 academic year, working with 50 schools, 147 teachers, and impacting 3,488 children and parents across three cities in Karnataka.

Effectiveness of training on teachers' knowledge, skills and mindsets

The Teacher induction training (APS Induction Training Details) was conducted in 3 different formats: In-person Induction, Online Induction and Short Induction. 139 pre-primary teachers attended one of the three formats of training as mentioned below:

- In-person Induction: 82% of teachers completed the In-person Induction training which was for 30 hours across 6 days.
- Online Induction: 54.5% of teachers completed the Online Induction training which was conducted for 12.5 hours, over a span of 14 days.
- Short Induction: 80% of teachers completed the Short Induction training which was for 15 hours across 3 days.



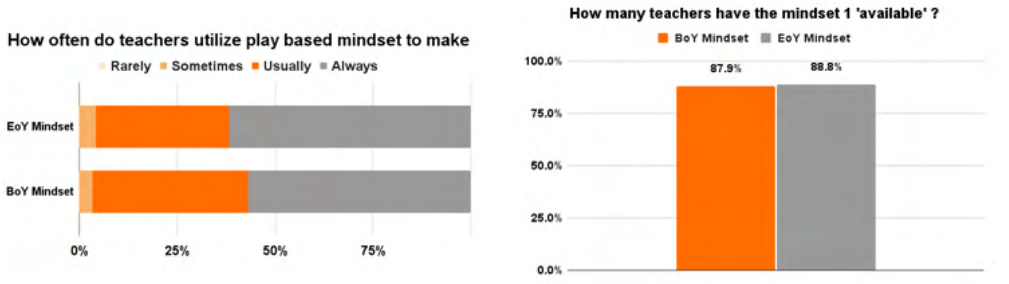
Graph 1: Comparison of percentage scores of teachers assessed in the Beginning (BoY) and End of the year (EoY) across different domains to assess teachers' knowledge on ECE topics and pedagogy1[1]

Domains of assessments	Shift from BoY to EoY %
KEF Curriculum	13.88
Positive Behaviour Support	7.54
Play in Early Years	7.14
Creativity and Curiosity	7.36
Assessment in Early Years	6.33
Language Development	5.65
Cognitive Development	4.65
Social and Emotional Development	2.89
Parent Engagement	1.07
Learning in Early Years	-6.72
Physical Development	-19.86

Table 3: Shift in percentage across domains of assessments from Beginning of the Year (BoY) to End of the Year (EoY)

1 *147 teachers were given an assessment related to these modules at the beginning of the year (BoY) in May-June 2022 and 124 teachers at the end of the year (EoY) in March 2023. However, due to teacher attrition and other operational issues we only had 86 teachers who were trained in May-June 2022 continued to take up the assessment during EoY

Teachers' have a fair understanding of classroom practices specific to literacy and numeracy. They are even able to express views that encourage holistic development, creativity and curiosity. However, their lack of knowledge on the importance of play and types of play is evident as the BOY score is lowest for the Play module and even through we notice a positive shift of 7% in the EOY score, this indicates that teachers do not prioritise building their knowledge on play even when content is offered in comparison to other training topics. It also brings us to reflect more deeply on how we can present knowledge and content on play more effectively to teachers.



Graph 2: The graph above represents the comparison of the availability (Left) and salience (Right) of mindset from Beginning (BoY) to End of the Year (EoY).

Teachers were also assessed using an in-house pilot tool on mindsets for early years. 47 teachers were given the mindset assessment at the beginning of the year (BoY) and at the end of the year (EoY). The teachers were assessed on the mindset - Teachers' belief in play-based teaching and learning practices.

The mindset was measured on 2 levels:

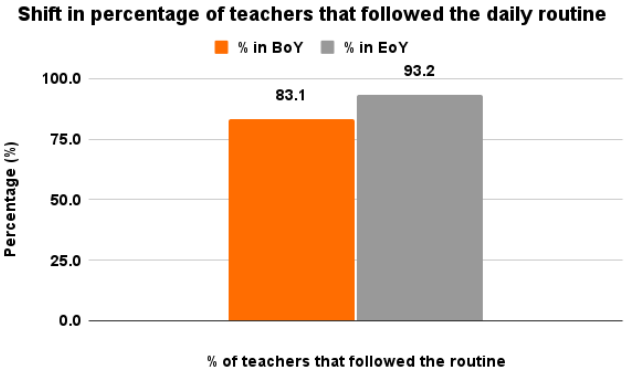
- Availability of Mindset: A series of questions were asked to see if teachers existing beliefs align with the mindset
- Salience of Mindset: A second set of questions/cases were presented to teachers to check if they utilise the available mindset to make decisions

We found that a high percentage of teachers had the mindset available and the salience of the mindset.

Interestingly, teachers seem to have a high belief in play-based teaching and also make the right choices on paper. However, you will see in the following sections that various other factors within their school environments can hinder them from

effectively implementing this mindset. It also leaves us to wonder- if teachers were given more agency in planning for their lessons with minimal pressure from school management would the quality of play in the classroom be much better?

Effectiveness of routine in enabling play



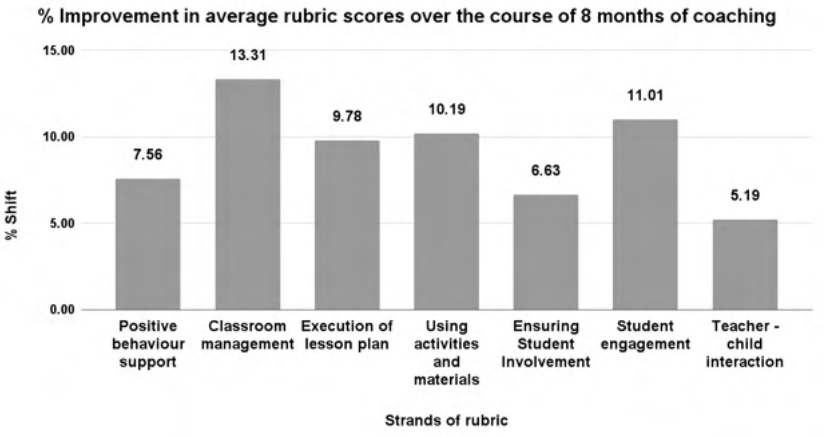
Graph 3: The graph represents a shift in the percentage of teachers who created a routine prescribed by KEF and followed it at the Beginning (BoY) and End of the Year (EoY)

Every classroom was visited monthly through the course of the year to check the implementation of developmentally appropriate practices. A total of 522 observations were conducted. In every observation a baseline indicator was marked to indicate whether a teacher was following the revised, holistic routine. It was found that there was a 10% shift in teachers who were following the routine on average during observations. 83.1% teachers were following the routine on average at the Beginning of the year (BoY) and 93.2% teachers were following on average at the End of the year (EoY) during observations[2*].

Establishing a routine helps teachers visualise how to bring play-based practices into their daily classroom practices. This helps incorporate play-practices through structures in the routine as shown in the previous section (Refer Table 2).

2 *all school visits and observations were pre-informed, Beginning of the year data is an average of observation conducted between June - August, and End of the year data is an average of observation conducted between January - March

Effectiveness of coaching on play in the classroom



Graph 4: Percentage shift in Teacher Rubric scores from Beginning of the year (June - August) to End of the year (Jan - March)

147 teachers were observed and their progress in the core classroom quality areas was checked throughout the course of the year[3*]. Intentional, need-based feedback was provided during visits to ensure that they progress on the following strands.

We find that teachers who progress well in these quality components are more capable of facilitating high-quality classroom activities and encouraging play for children in their classrooms.

While progress is slow, we do see a consistent improvement and positive impact of classroom visits and targeted coaching on quality of play.

Quality Component	Rubric Question
Positive behaviour support	Does the teacher use positive strategies to manage children during play and activities instead of negative or corporal punishment?
Classroom management	Does the teacher have structures in place to ensure children are on task, transitioning from one routine component to another to effectively manage time?

3 *147 teachers were observed across age groups and routine components, and an average of these across the 7 strands were taken to measure the shift

Execution of lesson plans	Is the teacher conducting the recommended activities?
Using activities and materials	Is the teacher using the teaching and learning materials that are aligned / appropriate to the activity being conducted
Ensuring student involvement	Is the teacher using appropriate strategies to involve as many unique children as possible in the activity? Ex: asking appropriate questions, using cold-calling sticks etc.
Student Engagement	Is the teacher able to engage the maximum percentage of children in the classroom through the activity ?
Teacher - Child interaction	Open ended and qualitative. For example: Is the teacher distributing her attention across children? Is her tone and demeanour towards all children positive?

Table 4: This table lists the Quality Component of the 4-point rubric used to mark teachers and the questions addressed during observation

Effectiveness of school leader conversations on play-conducive environments

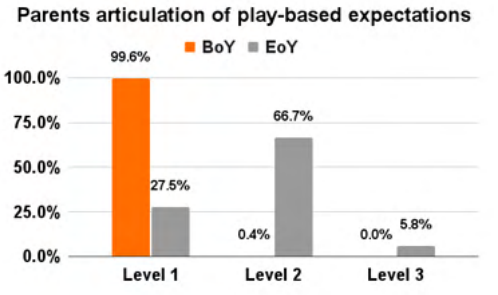
Despite monthly talks with school leaders to tackle classroom play barriers, measuring their impact remains challenging. Leaders, key in decision-making, face administrative issues and high teacher-student ratios. Classroom infrastructure prioritises desks over flexible seating, limiting play-friendly spaces. Limited outdoor areas and strict safety rules further restrict play. While a few leaders embrace change, most do not. Minimal improvement in leader investment in play suggests a need for broader capacity building to ensure sustainable classroom changes.

Shifts in parent mindset and awareness

We had 65% of parents attend workshops and receive digital video content. Two play-related videos had a 21% view rate. A survey at the beginning and end of the year measured parent awareness of play and developmentally appropriate practices. Parents were asked questions to gauge the choices for their children and were assigned to 3 levels based on their responses.

Outcome - Parents articulation of play based expectations from school	BoY	EoY
Level 1 - Parents' expect school to follow **traditional, rote based teaching**, and have a **low ask for activities** and play in school.	99.6%	27.5%
Level 2 - Parents understand **activities as the medium of teaching**, but feel it needs to be balanced with traditional rote based activities.	0.4%	66.7%
Level 3 - Parents expect schools to conduct **learning through activities, games**, and interactions with teachers and with other children. Their choice of school for their children often reflects their mindset towards **learning through play**.	0%	5.8%

Table 5: This table shows parent outcomes at Levels 1, 2, and 3, and the percentage shift from the BoY to the EoY



Graph 5: This graph shows the percentage shift in parents' articulation and demands regarding play from BoY to the EoY.

We see a slow but consistent improvement in parents' awareness and support for play-based learning. However, play is still often viewed as an addition to rote learning and writing, which remains their primary focus. As parents begin to see play as a primary form of learning, they also need to understand age-appropriate learning outcomes to overcome this challenge.

Overall, we see that despite rigorous training and coaching / conversations, Teachers and School Leaders find it challenging to follow a majorly play based approach and tend to give in to the demands of the parents on increased written and rote learning. Of the different kinds of play mentioned in our weekly routine (Refer Image 2), we find that outdoor play is the least priority in APSs, with reasons ranging from

children's safety, space and time as concerns. The children rarely get the opportunity to move around freely in their classrooms and explore their environment. With these challenges in mind, organisations and institutions will have to work collaboratively with all stakeholders (i.e., Parents, teachers and School leaders) who influence the learning process of the children to ensure schools provide adequate space for children, teachers, plan their routines with an apt balance of different kinds of play and parents are aware of age appropriate milestones, so as to not pressurise the schools with unrealistic demands.

Conclusion

Historically, transformations in low-income school settings have sustained when social, cultural, and systemic factors align. Sustaining play in APS environments requires a combination of:

- Mindset Shifts: Teachers, schools, and parents must be willing to embrace play as essential to learning.
- Affordable Resources and Infrastructure: Easily accessible materials and infrastructure are crucial for enabling change.
- Systemic Regulations: Regular monitoring and regulations for private schools ensure every child's right to play, as envisioned by the National Education Policy (NEP 2020).

Teacher training is the first step toward building awareness and shifting mindsets. Frequent, hands-on, and mandatory on-the-job training, where teachers practise and have resources to visualise and conduct play, has proven effective. Coaching teachers on play has shown minimal shifts in behaviour over one year, indicating the need for further evaluation to combine it effectively with training.

School leader conversations and counselling have little impact unless accompanied by systemic regulations to spur implementation and sustain change. Building parent awareness on play, shifts societal mindsets and parents' demands from schools, nudging school leadership to create child-friendly environments conducive to play.

Further studies on school-level barriers to play, such as grade 1 expectations and primary years' play culture, are needed to understand challenges comprehensively. A revised daily routine has the maximum impact on implementing play in the classroom, creating quick shifts at scale in improving playtime in the early years. Providing teaching and learning materials and ensuring ease of access enhances the quality of free play. Relying solely on teacher-made or locally sourced materials reduces opportunities for small group play.

In conclusion, while this study highlights best practices to encourage play in pre-primary classrooms of Affordable Private Schools, more research and advocacy targeting this sector are needed.

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14.

Importance of Creating Conducive Learning Environment around the Children: Psychological and Sociological Aspects of Children's Learning and Development

Smitin Brid

Abstract

This paper explores the psychological and sociological aspects of children's learning, emphasising the integration of experiences and the creation of safe, nurturing environments. Psychological factors such as cognitive, emotional, and social development, alongside sociological influences like family, cultural context, and societal expectations, play vital roles in shaping children's learning. The paper highlights the importance of parental engagement, which significantly enhances children's cognitive, social, and emotional development, leading to improved academic performance and reduced behavioural issues.

Parental involvement, particularly by mothers, fosters meaningful interactions and communication, positively affecting children's educational outcomes. The paper examines strategies to enhance this engagement, including community-based Mothers' Groups (at hamlet level), parent-teacher collaborations, and the use of digital tools and community engagement. By creating inclusive learning environments and supporting families, educators and caregivers can help children reach their full potential.

The paper calls for continued research to understand how parental engagement influences diverse groups of children and underscores the importance of collaboration between researchers, educators, practitioners and policymakers. This cooperation is key to building supportive environments that foster strong connections between parents, children, Anganwadis and schools, ultimately enhancing children's overall wellbeing and educational success.

Introduction

A strong early foundation in learning is essential for children's long-term educational success. Research consistently shows that when children begin school with confidence and strong foundational skills, they are more likely to thrive throughout their educational journey. Healthy development in the early years lays the groundwork for both academic achievements and emotional stability, contributing to the future wellbeing of individuals and the communities they are part of. As such, investment in Early Childhood Care and Education (ECCE) is crucial for individual prosperity and societal growth.

India has long recognised the importance of early childhood development, with programmes such as the Integrated Child Development Services (ICDS) launched in 1975 . Several national policies, including the National Education Policy (NEP), 2020, emphasise multi-sectoral approaches to ECCE. However, despite these initiatives, challenges remain in ensuring that all children receive the necessary support during their foundational years. There are persistent gaps in awareness about early childhood care and development at various levels, from caregivers to educators, which hinder the realisation of optimal developmental outcomes.

The Sustainable Development Goals (SDGs) have focused on young children's development, seeing it as the key to the transformation that the world seeks to achieve by 2030. Global organisations like UNICEF, the World Bank, UNESCO and WHO have also prioritised early childhood development in their programmes. All this speaks of the global focus on ECD and ECE.

India has been focusing on ECD from the 1970s. The oldest and largest national programme on child development, the Integrated Child Development Services (ICDS) was started in 1975. Many national policies have evolved with a multi-sectoral and multi-dimensional perspectives, which include – National Policy for Children (1974) , National Nutrition Policy (1993) , National Health Policy (2017) , National Early Childhood Care and Education Policy (2013) , and National Education Policy (NEP), 2020.

Despite having all these policies and programmes in place, it must be acknowledged that the overall picture of early childhood development and education is still not optimal. There is still a dearth of awareness about early childhood care, development and education at most levels – including front line workers, their mentors/supervisors, teachers, medical practitioners, and even parents.

In the last 25 years, India has made impressive strides in bringing children to school.

Today, well over 98.4%[1] of all elementary school age children are enrolled in school (ASER, 2022). Now, the major challenge is how to enable children to learn well. Despite being in school for a number of years, children's ability to read simple text or to do basic arithmetic operations continues to be weak. For a majority of children, years of schooling are not translating into years of learning. Even at Grade 5, more than half of all students do not have foundational reading or numeracy skills.

If we analyse the reasons behind this, then we will conclude with a lot of factors affecting children's foundational learning; may it being their irregular attendance in the school, lack of learning support back at the homes, they being the first-generation learners, lack of qualitative learning (reading) material, lack of conducive learning environment and so on. Among other reasons, they start their schooling without proper preparedness.

Often, children enter Class I with no preparation and go on to experience many difficulties with schooling and with learning. Many such children are not able to keep up with what is expected of them in school and fall behind academically. If we look further behind, then we get to know that there is not enough and quality preschool/pre-primary exposure available to all children. This further confines the early stimulation, nutrition and care in the first 0-6 years. Early Childhood Care, Development, and Education (ECCDE) services at grassroot level also lack adequate training and experience in prevention, early detection and early intervention.

As it is said, 'It takes whole village to raise and educate a child', this can't be the responsibility of only the Government; it is also a duty of society to support our children to grow in a conducive environment. This is a joint responsibility of the government and community!

Here we are discussing the various ways we at Pratham are trying to engage community and strengthening systems for quality early childhood education and development:

Engaging and empowering parents, especially mothers, in ECCDE processes

Developmentally appropriate activities at home and in preschools or Anganwadis are essential for building strong foundations in children's physical, socio-emotional, and cognitive development. Parental engagement, particularly from mothers, is critical in ensuring children reach Grade 3 with essential skills in reading and arithmetic, alongside a solid foundation for further learning.

1 In India, Annual Status of Education Report (ASER 2022) and a few other such surveys have been informing all of us since last 15+ years that more than 98% of children in rural areas have now access to primary schools, but still around 50% children are not acquiring basic literacy and numeracy skills.

Parents, especially mothers, serve as primary caregivers and are crucial in implementing Early Childhood Care, Development, and Education (ECCDE). Research consistently highlights parents as significant influences on children, particularly during early childhood, with early life experiences shaping brain development. Interaction between children and their caregivers is a key factor in this process.

Status and Role of Parents especially Mothers in Changing Context: Ground-level experiences in rural and urban communities show that supportive learning environments at home and in the community contribute substantially to child development. However, many parents lack the knowledge and resources to fully engage with their children. Mothers, particularly in Indian contexts, play a dominant role in influencing their child's learning outcomes, yet often prioritise health and nutrition over educational readiness in settings like Anganwadis. Recent data from Pratham-supported communities show that a majority of mothers of children aged 0-8 are literate and many have access to smartphones. Research findings from about 95 studies compiled by Johns Hopkins University (2013) showed a strong link between parental involvement and children's literacy, numeracy, and socio-emotional development, affirming that a nurturing home environment significantly improves children's preparedness for school. The importance of parental involvement was underscored during the COVID-19 pandemic, where parents had to take a more active role in continuing their children's education. This highlighted a long-term opportunity to involve parents more deeply in educational processes.

Learnings from Pratham's Models of Engaging Mothers: Pratham's mother engagement model aims to empower mothers to take an active role in their children's development and improve learning outcomes by transforming household environments into conducive learning spaces. She leads this action at home and engage other family members (father, grandparents and older siblings etc) in the process. Key objectives include improving mothers' understanding of child development, encouraging group-based support, and strengthening community involvement in learning.

The Mothers' Groups Model - How it works: Pratham's mothers' groups consist of 5-6 mothers in local neighbourhoods who meet weekly to conduct play-based educational activities with their children. These groups are supported by local schools, Anganwadi workers, and community leaders. The groups use low-cost, local materials to facilitate development in physical, cognitive, socio-emotional, and language domains.

Key components include:

- Weekly meetings where mothers watch demonstration idea videos and conduct activities in the group.
- Use of idea cards and videos, distributed via WhatsApp or SMS, guiding mothers on play-based learning.
- Feedback loops where mothers share their experiences and receive support from peers and Pratham staff.
- Periodic community events (MELAs) where children showcase their learning, and mothers receive guidance on improving their child's development.

Pratham's Idea of 'Mothers Group'

Pratham forms Mothers Groups at hamlet/ community level. Generally, one group means 5-6 mothers residing in the same neighborhood having similar age range of the children. These mothers' groups meet once in a week for 45-60 minutes according to their convenience in their mohalla (hamlet – neighborhood). The leader mother in each of these groups receive 'Idea Video' (*Watch a sample here - https://youtu.be/xqg9gsPYUzQ*). This video is watched in this group meeting and activities are conducted in the meeting itself. Then the mothers take support from other family members and conduct these learning activities with their children at home. They come back to the group in the next week and share their experiences with other mothers. This gives them a platform to share their experiences, challenges and also motivate each other. To see how it works in the group, please watch this response video - *https://youtu.be/GM7NW_oCxF8*

The mothers' group model is cost-effective and sustainable, relying on local infrastructure and volunteers. It is also inclusive, reaching even those with limited formal education or digital literacy. The initiative uses local radio channels and YouTube-based tutorials to engage mothers and communities, ensuring accessibility for all. Pratham's educational materials are freely available on their website, making them accessible to families regardless of economic status. The programme's scalability is evident in its growth across 20+ Indian states.

First implemented in 2015, the mothers' groups have since expanded to 50,000+ groups across 13 Indian states, involving 250,000+ mothers. Pratham has collaborated with state governments to scale up these initiatives, particularly in foundational literacy and numeracy (FLN) for early primary grades. In Maharashtra, around 300,000+ mothers' groups are formed under the NIPUN Maharashtra initiative, benefiting 1.6 million children. Pratham has also extended its approach to children aged 0-3, with initiatives in states like Maharashtra, Gujarat, Odisha, Chhattisgarh and Madhya Pradesh aiming to provide holistic early care and development by incorporating elements of health, nutrition, and early stimulation.

Impact of Mothers' Groups: In order to understand the impact of these mothers' groups, we at Pratham conducted various studies in our project geographies. An internal study of ~1,650 mothers was conducted in 2021 to assess the impact of an intervention on their awareness, understanding, and practices related to child development and learning.

Key findings include:

- Awareness of preschool education: An increased from 20% at baseline to 74% at endline was observed.
- Mother's practices: Time spent on child development/education increased from 60% to 80%.
- Understanding of developmental domains: Improved across physical, social-emotional, language, and cognitive areas, due to focused group activities and digital content.
- Mothers in groups (61%) showed better awareness and understanding compared to those who only received digital content (39%).
- Mothers without phones (60%) showed significant improvement when participating in groups, bridging the gap with phone owners.
- Mothers with low education (60%) also showed improvements in engagement, reducing gaps with more educated mothers.
- Working mothers (50%) had no significant differences in outcomes compared to non-working mothers, due to flexible scheduling and caregiver involvement in group meetings.

The findings of this study demonstrate the significant impact of the intervention on increasing mothers' awareness, understanding, and practices related to their child's development and education. The intervention effectively bridged gaps caused by socioeconomic, technological, and educational disparities, particularly through the

use of mothers' groups. Mothers who participated in these group meetings showed greater improvements compared to those who only received digital content, with substantial gains in understanding child development activities. Importantly, the intervention successfully engaged even mothers with limited resources, such as those without phones, lower educational backgrounds, and those involved in full-time or part-time work. This highlights the critical role of structured, community-based support systems in empowering mothers and promoting early childhood development, regardless of their initial circumstances.

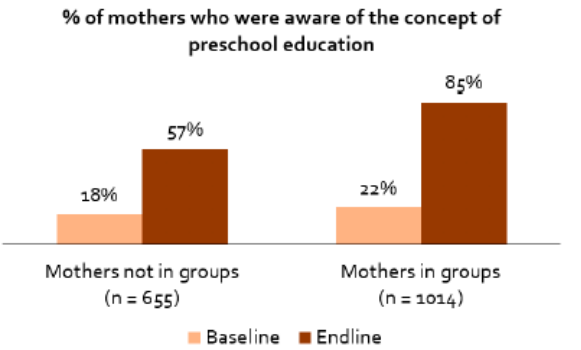


Figure 1: Comparative study of mothers in groups vs not in the group

Engaging community in the learning process

'It takes a whole village to raise and educate a child!'

Apart from the parents and families, the wider community also plays crucial role in upbringing the children. The children learn from their neighbours, elders-youth, friends, relatives, village leaders, school and Anaganwadi teachers, etc. Generally, many programmes only target the children and their caregivers and do not pay enough attention to the other important stakeholders of children's surroundings. Thus, engaging them in creating conducive nurturing and learning environment is important aspect.

We can try engaging these other stakeholders by motivating them to become volunteers, coaches, by getting their help in organising events for children especially for celebrating their learning journey. These stakeholders can help children by telling stories, improving their behaviour in front of the children as children imitate the adults, etc.

Recently, Pratham embarked on a programme to improve learning outcomes in children through a community-centred approach. "Hamara Gaon – Our Village" aims to consolidate learning interventions for multiple age groups in one village or

community and bring about sustainable change in the educational landscape of the village, through active involvement of these community actors.

Picture 1: Readiness Mela for Children Entering Grade 1

Within the early childhood spectrum, the objective of the programme is to ensure that children are "ready for school" and everyone around the child is aware of the learning needs of the children and can contribute to actively support them in the same. We engage youth, village leaders and others in organising READINESS MELA[2] an event to see whether our children are ready for entering formal schooling – grade 1 and help them in becoming school-ready.

Under this programme, one key activity undertaken by Pratham is the community event or "School Readiness Mela". This event seeks to engage local community members at large, including government officials, youth, Anaganwadi workers, school-teachers, and particularly, mothers and children. The purpose of the Mela is to understand children on their preparedness for school through a variety of fun activities and to demonstrate the same in front of the mothers. To watch the film: https://youtu.be/7breUu9oPpg?si=kcYnAXK-qtdd4tHI

2 https://www.education.gov.in/sites/upload_files/mhrd/files/nipun_bharat_eng1.pdf - Please refer page no 239

In order to engage community in the children's development and learning, Pratham has been demonstrating various successful ideas, such as:

1. Wall Paintings

In order to make the environment more conducive, it is important to create pro-learning environment in the village. We motivate volunteers, Panchayats to draw pictures, letters, numbers etc on the common walls in the villages, so that it promotes learning among children.

Picture 2: Wall Painting and Girl

2. Children's Learning and Library Groups

Children who are familiar with books and other printed materials tend to perform better in school and are more likely to develop lifelong love of reading and learning. The print-rich environment is foundational for the holistic development of young children, laying the groundwork for their future educational and personal success. By creating community (mohalla) based children's groups and libraries for them, we foster a culture of learning and reading together. We engage these groups in reading and creative activities.

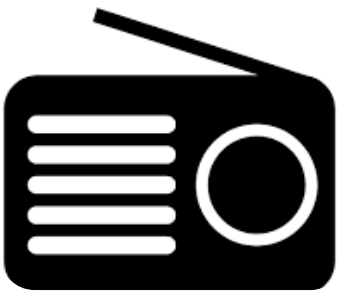
Picture 3: Happy children with their library books

3. **Volunteers (especially elder sisters – 'Didi's) Supporting Anganwadis in conducting Play-Based Learning Activities-Games**

Picture 4: A volunteer doing picture reading with the children in Anganwadi

In many communities, Anganwadis play a crucial role in early childhood education and development. In Pratham experience, volunteers - particularly elder sisters, have become invaluable in supporting these Anganwadis. Elder sisters, often having a close bond with the younger children, assist in creating a nurturing and familiar environment. They help conduct play-based learning activities, which are essential for the cognitive, social, and emotional development of children. By organising games, storytelling sessions, and creative tasks, these volunteers enhance the learning experience, making it engaging and enjoyable. Their involvement not only enriches the educational process but also fosters a sense of community and shared responsibility.

4. **Shalebaherchi Shala – A Radio Based Education Programme for children, parents, teachers and community**



Picture 5: Icon of Radio

Special Educational Radio programme started in the period of COVID-19 Pandemic for interacting with the children, their parents and teachers. The name of the radio programme is 'Shalebaherchi Shala'. This is one of the joint initiatives of the Government of Maharashtra and Pratham Education Foundation. This is a 30-minute education programme for children of Age 3 to 12. As per this initiative, parents and teachers tune in to the radio at 10:35 am every Tuesday, Thursday, and Saturday (or on YouTube). A task is shared through an SMS or a Whatsapp message a day earlier, on Monday and Wednesday, and Friday. It is revised during the broadcast. This broadcast involves a discussion of tasks. In villages where people neither own a radio nor possess a smartphone, the broadcast happens through a loudspeaker, which is placed at a public place, for example, a temple or an Anganwadi centre. This radio programme has created a societal momentum for sustaining children's learning especially in the period of the COVID

pandemic. This programme is being heard in 30+ districts of Maharashtra by nearly 4+ million children. To see the glimpses of the radio-based programme: https://youtu.be/vSUfq-oSlYQ

These are a few unique experiments of creating conducive learning environment in the community demonstrated impact. All of these ideas are evolved in the large-scale demonstration and therefore these are scalable and replicable solutions.

Conclusion

In conclusion, creating a conducive learning environment around children is fundamental to their overall development and success. A supportive and stimulating environment nurtures curiosity, fosters emotional and cognitive growth, and encourages a lifelong love of learning. By integrating elements such as safety, engagement, and inclusivity, and by providing diverse learning opportunities, we lay a strong foundation for children's future educational achievements and personal well-being. Investing in a positive and enriching learning environment not only enhances academic outcomes but also empowers children to explore their potential, develop critical life skills, and build the confidence necessary for their journey ahead.

Understanding the psychological and sociological aspects of children's learning and development is crucial for fostering their overall growth and well-being. Psychological factors such as motivation, emotional regulation, and cognitive processes deeply influence how children engage with learning, while sociological elements, including family dynamics, cultural influences, and peer interactions, shape their social skills and attitudes towards education. By recognising and addressing these interconnected dimensions, educators, parents, and caregivers can create supportive environments that cater to individual needs and promote holistic development. Emphasising both psychological and sociological perspectives ensures that children receive a well-rounded educational experience, enabling them to thrive academically, socially, and emotionally.

While cultivating a conducive learning environment, it is essential to foster the holistic development of children. Such an environment not only supports academic growth but also nurtures emotional, social, and cognitive skills, creating a foundation for lifelong learning. By ensuring safety, engagement, inclusivity, and the availability of diverse resources, we create spaces where children feel valued, motivated, and inspired to explore their interests. This approach not only enhances their educational experiences but also equips them with the resilience and confidence needed to navigate future challenges. Ultimately, a well-designed learning environment empowers children to reach their full potential, setting them on a path to success both in and out of the classroom and help them become future-ready!

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- The impact of family involvement on the education of children ages 3 to 8 (https://files.eric.ed.gov/fulltext/ED545474.pdf)
- The National Nutrition Policy was approved by the Government of India in 1993. The policy advocates a "comprehensive, integrated and inter-sectoral strategy for alleviating the multifaceted problem of malnutrition and achieving the optimal state of nutrition for the people" (https://homescience10.ac.in/storage/pages/ecurriculum/MSc%20F&N%20Sem%202/UNIT%206%20NATIONAL%20NUTRITION%20%20POLICY.pdf)
- The primary aim of the National Health Policy, 2017, is to inform, clarify, strengthen and prioritize the role of the Government in shaping health systems in all its dimensions-investments in health, organization of healthcare services, prevention of diseases and promotion of good health through cross sectoral actions (https://mohfw.gov.in/sites/default/files/9147562941489753121.pdf)
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- The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. (https://sdgs.un.org/goals)

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Films

1. A glimpse of how a mothers group watch an idea video in their group meeting and follow the instructions - https://youtu.be/GM7NW_oCxF8
2. A glimpse of the School Readiness Mela - https://youtu.be/7breUu90Ppg?si=536_u3bunoZsaFCP
3. A Radio Based Education Program for engaging with Parents, Families, Teachers etc - https://youtu.be/vSUfq-oSlYQ?si=AAHv-hhatSELtLo6
4. Examples of Idea Videos being disseminated to the Mothers Groups
    - https://www.prathamopenschool.org/catalog/ResourceView/c1f7c7cd-2ce2-4e82-b3a0-2d729b745e77
    - https://youtu.be/xqg9gsPYUzQ

About the Contributors

Aloka Dutta Gupta is Vice Principal of Greenfields Pre-primary School and an ECD professional for 42 years, deeply passionate about using music as a tool for learning. Her work involves designing unique curricula incorporating music and movement to teach every concept resulting in magical responses as children engage and learn with joy! She believes music is a bridge that connects young minds to nature and knowledge!(alokadgupta@gmail.com)

Amrita Randhawa has worked in the field of education since 2010. Amrita has a Master's degree in Education from the Harvard Graduate School of Education, and a Bachelor of Arts degree from Mount Holyoke College. She has been a teacher, a teacher educator and a researcher. She is presently a teacher at the Earth School. (earthschoolbangalore@gmail.com)

Anjali Govindankutty has been working in the education sector for the past seven years. Although an engineer by qualification, her professional passion lies in education. For the last five years, she has been with Key Education Foundation, focusing on early childhood education, programme design and adult coaching. Currently, she leads the Programme for Centres of Excellence in the private and government school space. (anjali@keyeducationfoundation.org)

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Jyoti Chinta has been working with Muktangan Education Trust as a teacher educator since 2009. She has a Bachelor's and Master's degree in Education from the University of Mumbai. She has been honoured with a gold medal from Bharatiya Vidya Peeth, Pune, for her exceptional performance in the Environmental Studies course. She has contributed to various outreach and advocacy projects of Muktangan such as ACOTE & Nipun Bharat. She has worked as a mentor to teachers and counselling parents for the enrichment of the school environment. She has trained teachers to enhance their professional skills and guided them to enrich the classroom culture. (jyotichinta@muktanganedu.org)

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Manasa Ujjini having pursued her post graduation in Human Development, she has always been driven by a passion for social work. Over the past two years, she has worked at Key Education Foundation as a Programme Manager. In this role, she has trained and coached teachers to enhance Early Childhood Education outcomes in Affordable Private Schools. Currently, she is overseeing a similar programme for 20 schools in Anekal as part of the organisation's work with the Govt of Karnataka. (manasa@keyeducationfoundation.org)

Manjusha Doshi has over 30 years of extensive experience in the social development sector. She has worked across rural, urban, and tribal areas with various stakeholders, including bilateral and government agencies, NGOs, corporate partners, and funding organisations. Her expertise spans child rights, child protection, and child development programmes. Since 2022, she has been associated with Tara Mobile Creches Pune, serving as CEO, where she continues to champion initiatives that improve the wellbeing of children in vulnerable communities. (doshi.manjusha@rediffmail.com); (ceo.tmcp@gmail.com)

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Purnima Contractor is Founder Director of Greenfields Pre-primary School. An ECD professional with four decades of experience in working with children, teachers and parents across all sections of society, she believes in holistic development and inclusive education using the medium of stories, music and movement to impart quality education, fostering creativity and creating joyful learning spaces. (contractorpurnima@gmail.com)

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Shreya Sawant has been working with Muktangan Education Trust as a teacher educator since 2014. She has a Bachelor's and Master's degree in Home Science specialising in Human Development from the University of Mumbai. She has been working as a teacher educator with expertise in Child Development Learning and Cognition. She has contributed to various outreach and advocacy projects of Muktangan such as CECED conference, and AECED conference, working in collaboration with the SCERT hub-spoke model, professional development of educators in rural Maharashtra, curriculum development for TISS-ECE courses. She has been trained by experts from Singapore on preschool Curriculum Enhancement programmes.(shreyasawant@muktanganedu.org)

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Smitin Brid with over 26 years experience in education development, leads Pratham's Early Childhood Programmes, overseeing strategy, content development, training, and impact assessment for early childhood education. He has spearheaded Pratham's work across multiple states in India. Smitin also conceptualised scalable programme models for engaging mothers in children's learning, strengthening family involvement in early development and school readiness. Smitin holds a master's in Public Administration, a certificate of proficiency with distinction in "The Best Start in Life: Early Childhood Development for Sustainable Development," a certificate in teaching and learning with technology, and a diploma in counselling skills.(smitin@pratham.org); (bridsmitin@gmail.com)

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