Executive Summary

An Evaluation of Mother Based Early Learning and Parents+ (MTELP+) Programme

Centre for Early Childhood Development and Research,

Jamia Millia Islamia

Commissioned by: Bernard van Leer Foundation (BvLF)



Contributions

The present research study is a result of the concerted efforts of the Core team, research team as well as data collection and entry personnel.

Core team

Prof. Zubair Meenai, Director, CECDR

Dr. Anubha Rajesh, Chair Professor, CECDR

Dr. Monu Lal Sharma, Assistant Professor, CECDR

Dr. Prachi Vashishtha, Former Senior Fellow, CECDR

Research team

Mr. ShamikhArsh, Research Officer, BvLF Project

Mr. Anmol, Research Associate, BvLF Project

Ms. Apoorva Tripathi, Research Associate, CECDR

Data Collection & Entry

Sigma Research and Consulting

ECE expert team

Prof. Adarsh Sharma, Former Director, National Institute of Public Cooperation and Child Development

Prof. Venita Kaul, Professor Emeritus, Ambedkar University

Prof. Rekha Sharma Sen, Faculty of Child Development, IGNOU

Dr. Shivani Nag, Assistant Professor, Ambedkar University

Mr. Chittaranjan Kaul, Director, Centre for Learning Resources

BvLF team

Ms. Rushda Majeed, Representative India, BvLF

Ms. Preeti Prada, India Programme Manager, BvLF

PMU team

Priyadarsini Mohanty, Programme Manager, PMU

Manoj Kumar Sahoo, Training Officer, PMU

Kapileswar Mohapatra, District Coordinator, PMU

Balakrishna Bisoi, District Coordinator, PMU

Ajay Kumar Khosla, District Coordinator, PMU

Padmini Pathi, District Coordinator, PMU

Srinibas Panigrahi, District Coordinator, PMU

Mukesk Kumar Behera, District Coordinator, PMU

Prasant Kumar Mohapatra, District Coordinator, PMU

Dipesh Kumar Nayak, District Coordinator, PMU

Nibedita Senapati, District Coordinator, PMU

Rajesh Kumar Mallik, District Coordinator, PMU

Judistirsahu, District Coordinator, PMU

Tapan Kumar Mohanta, District Coordinator, PMU

Subrat Kumar Bal, District Coordinator, PMU



Acknowledgements

Centre for Early Childhood Development and Research (CECDR), Jamia Millia Islamia acknowledges and extends sincere gratitude to all those who were associated with the project and have contributed to its completion.

CECDR would like to extend special gratitude to Department of Women and Child Development, Government of Odisha for providing the opportunity to undertake the study and for granting requisite permissions for data collection. CECDR also acknowledges and presents sincere gratitude to Ms. Rushda Majeed and Ms. Preeti Prada for their support, valuable suggestions and insights throughout the research project.

Further, CECDR appreciates the valuable facilitations of Project Management Unit (PMU)-MTELP+, Ms. Priyadarsini Mohanty, Programme Manager, PMU and the District Coordinators appointed by PMU. Their insights and suggestions were valuable for ensuring successful and meaningful data collection in far-reached areas of Odisha.

CECDR acknowledges the technical contributions of experts, viz, Prof. Adarsh Sharma and Prof Venita Kaul for their enriching insights during the expert consultations and on feedbacks for training modules. CECDR further extends special thanks to Prof. Rekha Sharma Sen, Dr Shivani Nag and Mr. Chittaranjan Kaul for their valuable inputs on the findings and recommendations. Apart from this, recommendations received from these experts were worthwhile.

CECDR is also thankful to all Anganwadi workers, Supervisors, CDPOs, parents and community members for sharing their experiences and proactively participating in data collection.

Background

he present research study was undertaken to evaluate the Mother Tongue Based Early Learning and Parents+ (MTELP+) Programme which commenced in 2016 in the state of Odisha. The MTELP+ programme was implemented by Programme Management Unit (PMU), which was setup by Department of Women and Child Development and Mission Shakti, Government of Odisha and funded by Bernard van Leer Foundation (BvLF) for a period of three years. The project was implemented with an underlying objective to propagate and practice mother tongue based early learning to benefit young children belonging to tribal population in Odisha and subsequently, lay robust foundation for future knowledge acquisition and learning. The PMU was responsible for:

- Scaling up a model of mother tongue-based multilingual early childhood education in 7,202 Anganwadi centres (Anganwadis), so that children experience improved learning environments, demonstrate better language proficiency, and make successful transitions to primary school;
- Strengthening the skills and capacities of government policymakers, managers and frontline workers to deliver high quality mother tongue-based early learning programmes; and
- Strengthening the use of Anganwadis as platforms for parental and community engagement focused on the holistic development of children under six years of age.

Status of Mother Tongue Based Multilingual Early Childhood Education (MLE) in India

In India, various documents, such as position paper, policy brief, curriculum frameworks have reiterated the significance of use of varied mother tongues in early childhood settings and in primary grades. The recent preschool curriculum developed by National Council of Educational Research and Training (NCERT) emphasizes that in situations where children with more than one mother tongue exist, then; it would be most conducive to let children express themselves in their respective mother tongue (NCERT, 2019). Further, the National Early Childhood Care and Education (ECCE), Curriculum Framework advocates the use of mother tongue/ home language as medium of instruction and that all the children in ECCE centres should be allowed to speak their respective mother tongue, as this would further assist young children to be emotionally secure (Ministry of Women and Child Development

[MWCD], 2013). Keeping this in view, children should be encouraged to gain competence in their mother tongue and then move towards learning additional languages. Empirical evidence confirms children who are fluent in their mother tongue are self-confident and motivated to perform well. This further enhances their enrolment, ability for comprehension and school performance (Ball, 2010; Kosonen, 2005).

Research has documented that the multilingual education (MLE) has positive influence on academic and scholastic performance. For instance, in India (Andhra Pradesh and Odisha), Panda, Mohanty, Nag, & Biswabandan (2011) established that primary grade children from MLE schools performed significantly better on tests of mathematics, EVS and language than those in non MLE schools. Besides, the performance of MLE children improved significantly, as they progressed through primary grades. Additionally, MLE classrooms were better in terms of children's participation, children centered activities and teachers' teaching practices. For example, in MLE classrooms, there was greater interaction among students and between students and teachers. The teachers in MLE classrooms put to use interactive teaching materials such as storybooks and blocks and focused on advancing students' engagement in varied activities. All these positive dimensions were nearly absent in non-MLE classrooms, wherein teachers used oral, didactic lectures to teach children and teacherchildren interaction were negligible. The authors posited that tribal children's academic performance would improve if exposure to their respective mother tongues was for longer durations (Panda et al., 2011). Evidence from global research also informs the effectiveness of engaging children from marginalized communities through MTB-MLE (Benson & Kosonen, 2013).

Despite the rich evidence, majority of tribal languages do not find a place in formal education sectors and literacy programmes as medium of instruction. The languages spoken by the tribal populace, do not gain recognition because these are not utilized in education,

Teaching children in any other language apart from their mother tongue is akin to throwing children in water without prior swimming lessons (Benson, 2005)

economic and political realms, and are perceived as powerless in comparison to dominant languages. The restricted use of tribal languages coupled with illiteracy and economic vulnerability jeopardize day to day existence of tribes (Mohanty, 2008). Scholars have had used phrases such as 'crime against humanity' and 'linguistic genocide' to put emphasize on the gravity of pervasive disadvantage encountered by children, due to neglect of their

respective mother tongues in educational settings coupled with use of dominant language as the medium of instruction (Mohanty & Skutnabb-Kangas, 2013; Arnold, Bartlett, Gowani, & Merali, 2006).

Therefore, researchers have recommended that attaining basic linguistic competencies and subsequently gaining proficiency in one's mother tongue should be set as benchmark for children in preschool as well as in primary school. Teacher trainings (pre and in-service) need to be directed towards advancing teachers' expertise in mother-tongue based early learning to enable them to engage children in pedagogically and culturally appropriate manner. Next, parents' position as 'first teachers' need to be promoted to ensure children gain command over basic rules of their mother tongue (Ball, 2010).

Involving Parents in Mother Tongue Based Early Learning

Parents are the primary educators of their child. Children learn from their experiences and interactions with their family members. Research informs that responsive parenting has a significant effect on children's outcomes. International research on parent involvement in Early Childhood Education (ECE) has established that parent involvement positively impact the early leaning, improves social relations and enhances young children's efficaciousness (Fagbeminiyi, 2011). It has been established that parents influence early learning of their children by providing literacy rich home environment, stimulation, especially in form of cognitive stimulation (International Child Development Initiative [ICDI] and Bernard van Leer Foundation [BvLF], 2012). Mishra (2012) conducted a research study to examine the role of parents in early childhood years in Dhenkanal District in Odisha and put forth that parental involvement in terms of emotional care and support has a positive impact on the performance of children in early years.

Parental engagement can be promoted using various strategies. At Pratham, mothers were engaged through building and enhancing their awareness about food and feeding practices, basic health and child's holistic development. An array of games, activities and discussions were planned and organized with parents. Discussion cards were developed and used to facilitate discourse on topics such as early years and domains of development (Pratham Education Foundation, 2018a). Parents and community can be encouraged to be involved in preparing resource materials, assist in monitoring and supervision to ensure quality preschool programmes for their children. In the document titled 'Potential Good Practices: The ICDS

Experience', few good practices pertaining to parent and community involvement in Anganwadi centres were highlighted. In Kerala, Village level monitoring and Panchayat level monitoring of AWC was conducted by ward members and health education committee, respectively. While, in Tamil Nadu, two members per committee were entrusted with responsibilities to bring children to AWCs, contribute by providing play materials, construction and upkeep of kitchen garden.

Parental engagement creates awareness among parents. The parents become familiar with the type of play activities and learning experiences that are organized in Anganwadis/ preschool and are able to replicate and extend these learning activities at home. This helps in promoting a stimulating environment at home and they are able to contribute to their child's holistic development.

The Present Study

The evaluation study was comissioned with following objectives:

- 1. Evaluate the effectiveness of delivery of the MTELP+ programme including:
 - a. Effectiveness of training of Anganwadis workers (AWWs), Lady Supervisors (LSs) and (Child Development Project Officer) CDPOs trained as an integral part of MTELP+ programme.
 - b. To assess the capacities of AWWs, trained as an integral part of MTELP+ programme to transact quality Early Childhood Education (ECE) with a focus on MT based multilingual education.
 - c. Examine the capacities of AWWs to engage parents and community in Anganwadi.
- 2. Evaluate the extent to which the partnership between Department of Women and Child Development and Mission Shakti, Government of Odisha and BvLF has built the implementation capacity of the former to deliver quality early childhood education with a special focus on MTELP+ programme.
- 3. Highlight innovative, evidence-based, good practices in mother tongue-based early learning in intervention districts.
- 4. Evaluate the progress of key programme activities vis-à-vis the MOU and programme implementation framework (documenting deviations, if any) and assess the efficiency or drawbacks due to deviations (Desk review based secondary data).
- 5. Provide recommendations to inform practice and policy in the area of mother tongue based early learning and parental engagement in ECE.

Methodology

Both qualitative and quantitative research approaches were employed to comprehend the nuances of MTELP+ programme. Further, descriptive as well as inferential statistics were used for analyzing the data collected.

Research design and sampling	Sample units	Tools and measures			
1. Research design	1. For observations	1. Observation tool			
Pre and post without	1448 AWCs	Anganwadis			
control design*	2. For interviews	Assessment Scale			
2. Sampling technique	i. 1448 AWWs	(AAS)			
Stratified random	ii. 42 LSs	2. Interview schedules			
sampling was used to	iii. 23 CDPOs	each for			
sample Anganwadis	iv. 2871 parents	AWWs, LSs, CDPOs			
from 7202 baseline	v. 12 Focus Group	and Parents			
Anganwadis	Discussions	3. FGDs with parents			
3. 20 percent of 7202	(FGDs)	and community			
Anganwadis were		members			
sampled					
4. 1 FGD per district					

^{*}Pre and post comparison was applicable on selected items within various tools



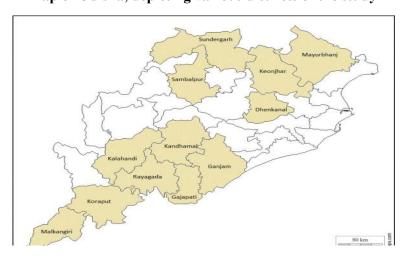
Sample of the Evaluation Study

The CECDR had proposed to consider 10 tribal languages (namely, Bonda, Juang, Kissan, Koya, Kui, Kuvi, Munda, Oram, Santali, and Soura) from 12 districts, for the evaluation study. Nonetheless, apart from these languages, the data from the field showcased presence of a number of other tribal languages (Mother Tongue of children), although in negligible numbers if each MT was taken separately. Moreover, in 13.81 percent Anganwadis (200 Anganwadis), Odia was reported to be the MT of children.

Table 1.1: Sampled Anganwadis Observed in 12 Districts and Usage of Languages

	Sampled Anganwadis Observed in 12 Districts and Usage of Languages (N=1448)													
Sl No	District	Santali	Soura	Kui	Munda	Kissan	Kuvi	Koya	Juang	Oram	Bonda	Odia	Other lang.	Total
1	Kandhamal			159								28	1	188
2	Kalahandi			12								24	0	36
3	Malkangiri							68			4	2	6	80
4	Rayagada		27				138					54	6	225
5	Gajapati		185	14								14	7	220
6	Koraput						88					1	0	89
7	Ganjam		4	4								7	0	15
8	Mayurbhanj	257			52							13	36	358
9	Sundergarh				36					4		18	6	64
10	Keonjhar	35			37				13			33	28	146
11	Sambalpur				1	2						4	0	7
12	Dhenkanal	4			5				4			2	5	20
		296	216	189	131	2	226	68	17	4	4	200	95	1448

Map of Odisha, depicting various districts of the study



Major Findings

The MTELP+ programme with its concerted efforts made worthy achievements in scaling up the model of mother tongue based multilingual early childhood education and strengthening the skills and capacities of government policy makers, managers and frontline workers. Political will, complemented with concerted efforts of PMU, in concurrence and commitment from ICDS functionaries are seen as the significant factors that led to valuable accomplishments of MTELP+ programme.

Effectiveness of delivery of the MTELP+ programme

The Anganwadi Workers: Emerging Gains

Nearly three-fourth of the AWWs had barely managed secondary school or even less. Of these, 41.37 percent AWWs had completed class 10th and nearly one third (31.56 percent) had schooling in range of class 6-9.

Majority (86.95 percent) AWWs from the sampled Anganwadis who received MTELP+

AWWs on trainings

- More than four-fifth AWWs (86.95 percent) informed that they received training on mother tongue based early learning
- Other topics covered in the trainings were child development (63.38 percent AWWs) and TLM design and usage (49.80 percent)
- Nearly all AWWs (98.49 percent) opined that trainings were useful

interventions had received MTELP+ training. Given the low education levels of AWWs, it was helpful to train them at the beginning of the MTELP+ intervention and additionally provide hand-holding support for close to half of AWWs (47.79 percent) at least once a month. The opportunities for hand-holding were assertively promoted by the 10 District Coordinators appointed by of PMU-MTELP+ programme to provide oversight to the implementation of the programme at the district level.

Data from interviews with AWWs, informed that most of the AWWs (81.77 percent) favored usage of children's mother tongues when the child first comes to an Anganwadi. Close to three-fourth favored the usage of multilingual environment (children's mother tongue and the State language) while transacting the curriculum in Anganwadis. Enhanced participation of children and less fear among the children were the reasons cited for advantage of using

mother tongue in Anganwadis. Pre and post comparisons revealed an improvement in AWWs' awareness regarding ICDS (three percent point increase from 92.00 percent to 95.1 percent) and National ECCE policy (seven percent point increase from 85.00 percent to 91.99 percent).

Key observation

Odia was spoken by AWWs during conducting various activities in majority of Anganwadis; meanwhile, it was heartening to note that AWWs also conversed in children's mother tongues and various tribal languages in nearly two-third Anganwadis.

Besides, after the intervention, 32.96 percent AWWs indicated that learning commenced at birth compared to merely 12 percent at time of pre-testing.

Engaging children through play-way approach and activity based learning, supported with guidance from AWWs themselves, were reported as an effective way to encourage children learn by more than half of AWWs (55.48 percent). Linking learning to contextual activities through storytelling, poems and songs, development of TLMs like flash cards, picture cards was reported by three-fourth of AWWs. A variety of activities like picture reading/ shared reading/book handling, organizing scribbling, drawing /writing activities, were reported by AWWs to promote language and literacy skills among children. The dynamic shifts observed from rich engaging interactive activities to high order thinking and exploratory activities showcases the increased capacities of ICDS functionaries specifically AWWs and LSs. Nonetheless this was just a beginning visible in the positive gains among AWWs as the percentages varied. Further, these shifts and gains in the capacities of ICDS functionaries need to be sustained and built further.

The interviews with Anganwadi workers revealed that the trainings were successful in promoting MT based early learning, usage of MT in Anganwadis and understanding ECCE with a few activities. However, when the data was analyzed further the gain and activities conducted across the Anganwadis was uniform in their own way. For instance, if the science experiment of floating was being demonstrated, it was a similar experiment showcased across the Anganwadis and continued from the day the trainings were organized. Only a few proportion of AWWs talked about scribbling, writing and phonemic awareness as activities to be conducted for promoting early literacy skills among children. Further, only a few proportion of AWWs shared about the MTELP+ programme building their capacities for partnerships with parents, community and assessment of children. In discussions with parents on AWWs sharing progress of children with them only close to one-fifth of parents

mentioned the usage of assessment cards. The others shared that the progress of children was discussed during meetings or home visits but did not talk about assessment cards.

The Lady Supervisors: Emerging Gains

All the LS had received training on MTELP+. During interviews they shared their understanding of MTELP+ programme and its interventions. They described the MTELP+ programme as a critical aspect of quality early learning that primarily focused on teaching children in their Mother Tongue. Teaching children in their Mother Tongue increases the participation level of children and their understanding is enhanced.

Mentoring and Supportive Supervision

Joint visits of DCs with LSs and CDPOs on monthly basis facilitated continuous capacity building and handholding with an increased efficiency for ECCE monitoring. This was a significant component of training conducted at the district and state level and was leveraged at the Anganwadi level. The PMU team shared their observations and findings on appropriate forums, viz, district review meetings, project meetings, and sector meetings. PMU provided handholding support to CDPOs and LSs on how to transact activities using 'Nau Arunima', on ECCE, and how to organize an ECCE day.

Development and usage of monitoring tools was an effective step to ensure accountability. Monitoring also involved regular observation of early childhood education transactions at Anganwadis, home visits, and interaction with communities.

Close to half of the AWWs (47.79 percent) indicated that they were provided guidance and support by the lady supervisors once a month. The frequency of visits by LSs varied from district to district and block to block. It also varied at the individual level. Some of the LSs reported that they visited an

"I have to look after 112 centres and thus am not able to visit an Anganwadi regularly. I visit an Anganwadi once in 3 months. However, I am available for all AWWs. Whenever they require any sort of support from me they approach me." A Lady Supervisor, from Kasinagar, Gajapati

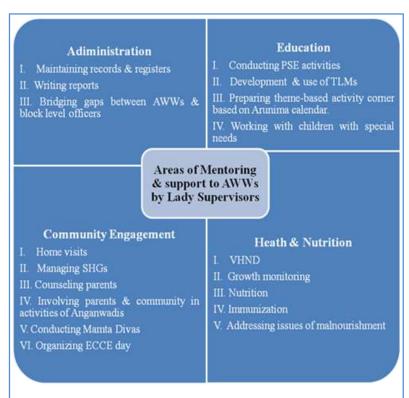
Anganwadi at least once a month while others were able to visit an Anganwadi once in 3 months. LSs reported that they were overburdened with a lot of additional responsibilities

¹ 'Nua Arunima' is a handbook of preschool education activities used as a resource booklet by Anganwadi workers.

which restricted their visits to the Anganwadis. Geographical barrier was another reason that affected their frequency of visits to Anganwadis.

In order to supervise and monitor the AWWs, LSs took various measures. LSs personally visited Anganwadis in order to monitor their functioning. During the visits, LSs informed the AWWs about the new schemes launched by the government, observed the activities conducted in the Anganwadis, checked/verified records and registers, shared good practices

observed in Anganwadis and enquired about the difficulties faced by **AWWs** the in performing their role and responsibilities. LSs also visited children's homes to meet parents in order to get the feedback regarding activities conducted in the Anganwadis. During the visits, LSs made use of an observation



tool that served as a guide to plan what all should be observed in the Anganwadis. This tool termed as 'Advance Tool Plan', was a format developed by the PMU and was also used by the LSs for conducting monitoring visit to the Anganwadis.

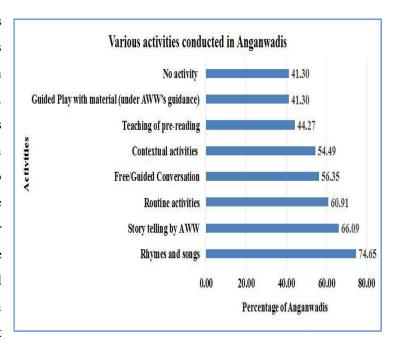
Transaction of Quality ECE with MTELP+ Focus

Various parameters of a quality ECE Anganwadi were measured, namely, "Child friendly environment' (A total of 7 items that included components like overall set-up of Anganwadis, organization of activity corners, appropriate display of charts, pictures and materials prepared by children, availability of PSE kit, and mat for children); "Curriculum transaction" (A total of 16 items that included components like seating arrangement of children, medium of instruction/ languages used by AWW, availability of weekly schedule, participation of

children in activities, planning of PSE activities by AWW, planning and conducting activities in different domains of development, appropriate TLM and its usage and play way or activity method); 'Teacher child interactions' (A total of 9 items inclusive of components like calling children by their name, encouraging children, providing positive reinforcement to children, inclusive environment and disciplining of children) and 'Safety of children' (A total of 5 items inclusive of safety level of the Anganwadi building, cleanliness, hazardous conditions around Anganwadi, handing of children to adults and presence of first aid box).

The results from observations informed that majority of Anganwadis were performing good or average on the four quality dimensions. The districts Sambalpur, for 'Child friendly environment', Sundergarh for 'Curriculum transaction' and Malkangiri for 'Teacher child interactions' and 'Safety' were computed to be performing significantly well.

Observations at Anganwadis provided meaningful insights the shifts seen transaction of curriculum. Transaction of activities utilizing play way approach and encouraging children to be active learners set a stage vibrant centres children in Odisha. While rhymes and songs continued to be a popular activity in most of the Anganwadis, it



Most of the stories were read out/ narrated to children from the Arunima. The story was written on one page with a small black and white picture. While narrating stories the books were not shown to children. In a couple of other Anganwadis a story card(s) with the story displayed in six boxes was used.

Observer, Kandhamal, Gajapati, Rayagada.

was heartening to see an increase in activities like storytelling, free or guided conversations, contextual activities and pre-reading activities.

Storytelling using books was a welcome activity; however, a need to provide inviting and well-illustrated story books will be appreciated. The

field investigators shared their observations on limited availability of appropriate and child-friendly story books. Further, the organization of activities like story telling by children, coloring and drawing, role play/ dramatization, indoor games, clay/ sand play was observed in less proportion of Anganwadis.

AWWs usage of language, children's usage of language and AWWs usage of language when responding to children all inform the presence of multilingual environment available to children. The usage of both Odia and mother tongue was observed in most of Anganwadis. Further attempts were made to understand the relationship between the quality dimensions of ECE and usage of language. The mean plots revealed that 'Child friendly environment' was better where AWWs were using mother tongue and Odia language across all the districts whereas 'Curriculum transaction' and 'Classroom process' (teacher-child interaction) were better where AWWs were using mother tongue across all the 12 districts.

The evaluation further attempted to understand the relationship between the quality dimensions of ECE and usage of language. The mean scores from the observation schedule for the various quality dimensions were drawn with respect to languages used. The mean plots revealed that child friendly environment was better where AWWs were using both, mother tongue and Odia language across all the districts whereas curriculum transaction and classroom process (teacher-child interaction) were better where AWWs were using mother tongue across all the 12 districts. On the whole the data established the effective role of mother tongue in making a better or conducive environment for children in Anganwadis. Use of mother tongue also facilitated AWWs' role in transacting the curriculum effectively and efficiently which positively impacted the classroom interactions between the AWWs and children. This may be attributed to effectiveness of training of AWWs on mother tongue based approach.

Relationship between the quality dimensions of ECE and usage of language.

Anganwadis' assessment revealed that across districts, two quality dimensions, viz., curriculum transaction and classroom processes (teacher-child interaction) were better where AWWs used mother tongue, whereas, another quality dimension, child friendly environment was better where AWWs used mother tongue and Odia language. Therefore, establishing that mother tongue based trainings rendered to AWWs, were effective.

Observations of Anganwadis informed availability of organized child friendly spaces. The presence and utilization of Activity Centres/corners in more than half Anganwadis was a delight to the eyes. However, the next shift to be observed could be developing the activity corners theme wise. The TLMs were systematically arranged and accessible to children. However, the observations inform that good quality and quantity of PSE kit (TLM) was available in less than half (41.37 percent) of Anganwadis observed. The wall decorations were contextual, appropriate, colorful and placed at eye level of children in more than half of Anganwadis. Materials prepared by children were in display in less than half of Anganwadis. The display of children's work was missing/ average in two-third of Anganwadis.

Observations inform that on day of data collection in majority of Anganwadis it was the AWW who was transacting the curriculum. However, it is explicit that there are many occasions where the helpers organize or provide custodial care for children in absence of AWW. Again in majority of Anganwadis the children were seated in circles/ semicircles. The presence of a time-table, number of children participating in activities, planning of activities, transition from one activity to other, children selecting activities of their choice was visible in close to half of Anganwadis.

Observations of activities conducted at Anganwadis revealed the dynamic shifts from common activities like rhymes and songs that are considered to be rich, engaging, interactive activities to high order thinking and exploratory activities. These activities showcase the increased capacities of ICDS functionaries specifically AWWs and LSs to provide children with a range of exposure. The presence of a multilingual environment with usage of mother tongue of children had increased the participation levels of children. An effort to create an environment, conducive for discussion and participation of children was encouraged. In close to half of Anganwadis, the AWWs would encourage children to ask questions and provide positive reinforcement to children. The observations revealed that the children were engaged in early learning activities for good duration. The multilingual approach with a focus on mother tongue had strengthened AWWs skills to engage children effectively in early learning activities. Activities like early literacy to support children become school ready were visible in one-third of Anganwadis. Activities like transaction of early numeracy and writing were seen in less proportion.

The evaluation laid specific focus on relationship between training and quality ECCE provisions. Findings revealed that trained AWWs were able to run Anganwadis effectively as

compared to AWWs who did not receive training. All components of quality ECE programme namely, 'Child friendly environment', 'Curriculum transaction', 'Teacher child interactions', medium of instruction, availability & utilization of TLMs were significantly associated with training of AWWs.

Developing contextual tools for usage in Anganwadis

Young children tend to grasp concepts faster if activities they engage in, take into consideration their day-to-day environment. A slightly over four-fifth AWWs (78.18 percent) shared that they used stories, poems and songs prevalent in children's culture to make activities meaningful and engaging. 71.55 percent Anganwadis indicted that TLMs, picture cards, flash cards,

"There was also a remarkable increase in the use of examples from the Local culture, use of locally available materials such as vegetables, tools etc., and the use of socio-cultural context while transacting the curriculum in the classroom." A Lady Supervisor

had pictures representing children's local culture. However, the availability and usage of TLM does show the inadequacy in the TLM available at the Anganwadis and in many instances if is available it is not used by the AWWs.



A Comprehensive Picture of Performance of Anganwadis

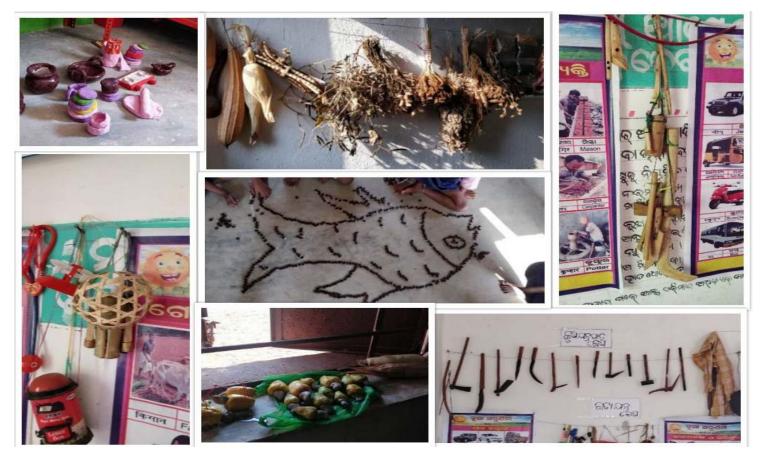
To gain a comprehensive understanding of performance of Anganwadis, total scores of the four components (Preschool Environment, Curriculum Transaction, Classroom processes and Safety measures) of observation tool (AAS) were taken. These scores were split into three categories of good, average and poor performing Anganwadis.

Table: Frequency and percentage of the Anganwadis based on their performance

Indicators	Range of scores	Frequency	Percentage
Poor	38 - 66	54	3.73%
Average	67 - 95	744	51.38%
Good	96 – 114	650	44.89%

The results inform that nearly 44.89 percent Anganwadis were performing well. However, the average performing Anganwadis (51.38 percent) and poor performing Anganwadis (3.73 percent) had to show further progress.

Low cost no cost contextually relevant TLMs in Anganwadis across Odisha



Shifts in Child Friendly Environment and Curriculum Transaction

The shifts observed in the Child Friendly Environment and Curriculum Transaction was reassuring. They informed that the interventions were progressing in the right direction; nonetheless this was just a beginning. Committed and sustained efforts are required to ensure that the positive outcomes of the MTELP+ programme last.

Availability of Time Table

In the baseline report it was observed that the Time table was followed in only 12.46 percent of Anganwadis whereas in the evaluation it was found that the Time table was followed in half of the Anganwadis (50.62 percent).

Local Contextual Material

Examples from tribal context were used only in **9.9 percent** of the Anganwadis during the baseline study. There was a significant increase after the intervention of BvLF in terms of using examples from socio-cultural context. It was observed that the AWWs were using locally and context specific materials while transacting activities in **33.15 percent** of the Anganwadis.

Usage of TLMs while transacting curriculum

During the baseline study, frequent use of TLMs was undertaken by only 12.47 percent AWWs. After the intervention of BvLF it was found that 36.53 percent Anganwadis were using TLMs during majority of activities.

Use of TLMs was noticed in few activities in almost half of the Anganwadis (50.76 percent) against the baseline study where TLMs were used in few activities in 23.32 percent of the Anganwadis.

Display of children's work

During the Evaluation study it was found that in about one-third of Anganwadis (31.63 percent) the recent work of children was on display which was in only 8.49 percent Anganwadis during the baseline study.

In 30.46 percent Anganwadis, the materials made by children were on display during the evaluation study against 21.13 percent Anganwadis in the baseline study. However the materials displayed appeared to be old and had not been changed for about 2 months.

Arrangement of TLMs and Activity corners

Functional activity corners where TLMs were within the reach and could be used by the children whenever they wanted, were present only in 10.11 percent Anganwadis during the baseline which had now increased to 53.73 percent Anganwadis during evaluation study.

Display of material at the eye level of the children

Display of visually attractive materials which are of interest to the children displayed at the eye level of children has increased from 19.01 percent in the baseline study to 44.89 percent post intervention.

Capacities of AWWs to Engage Parents

Interviews with ICDS functionaries and parents informed that overall parental engagement had increased. Majority of parents participated/ interacted with AWWs. The parents were aware of activities being conducted at Anganwadis. Their frequency of visiting Anganwadis had increased and they met AWWs during meetings, workshops, THR distribution, or while dropping off and picking up children to and from Anganwadis. However, participation of parents on ECCE day needs to be encouraged. Also, the increase in spread of private schools had brought shifts in mindsets of parents. While on one hand they believed that Anganwadis were a place where children came to play. The shift in their thoughts informed that they preferred private schools over Anganwadis as these were the platforms where children learned counting and alphabets.

Majority of AWWs (70.72 percent) engaged with parents during Parent-Teacher Meetings (PTMs). Two-third of AWWs made home visits to interact with parents of young children. More than half AWWs interacted with parents when the latter came to drop off and pick their children. Also, these two occasions were used to share children's progress with the parents by more than half of the AWWs (59.94 percent AWWs during

Challenges faced by AWWs in engaging parents

- Low parental literacy level
- Most parents, either worked in farms or were daily wage earners, hence did not regularly visit Anganwadis
- Unawareness among parents regarding importance of early years education

PTMs and 58.29 percent AWWs during home visits).

While MTELP+ programme seems to have achieved most of its envisaged activities, the Parents+ programme was in progress simultaneously with the evaluation. The progress reports highlight the orientation provided to State level officials, SLMT and PMU team members on brain development and Parents+ by Ms Rachel, ECD Expert, BvLF, Netherlands. Trainings for LSs were also organized simultaneously to strengthen their skills on MTELP+ programme. These skills were further transferred to AWWs through monitoring and handholding.

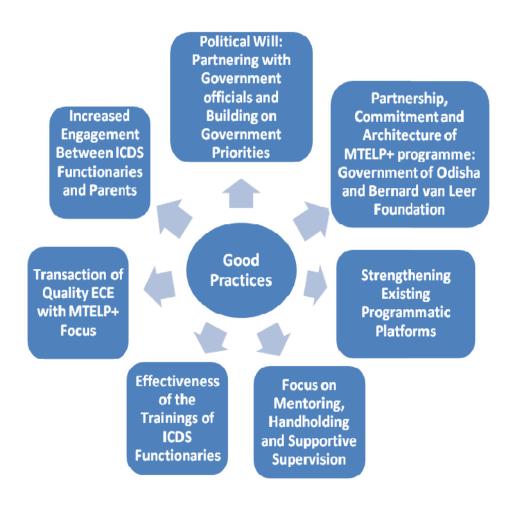
The progress reports further inform about the interactions and orientation of parents and community from January 2018 to March 2019. These were initial efforts to engage with the parents and community to sensitize them on importance of early years, brain development

and the significance of early stimulation, the mother tongue approach and role of parents as valuable contributors.

These efforts were further strengthened through the development and launch of Parents+ module in August 2019. The AWWs were to be trained on the module and strengthen the component of sensitizing the parents. As the activities for Parents+ programme were in progress, the evaluation process was not able to capture the recent developments as a part of this activity.

Strategic plans are envisaged to make the Parents+ programme robust. The proposed activity plan for January – December 2020 lays an array of diverse activities to strengthen ECCE technical support for Parents + with a focus on 0-3 year children.

Good practices observed in Anganwadis across Odisha



Innovative Practices at Anganwadis



Use of Indigenous and Contextual Material

Importantly, noteworthy practices involved, use of low cost and a variety of indigenous materials. This further assisted children in gaining awareness about their day to day surroundings. Additionally, in Rayagada district, children used sticks to make mathematical figures, viz, triangles and rectangles on the ground. AWW drew various shapes on the ground, such as leaves, mangos, and subsequently, children put marbles on the boundaries of those shapes. Introduction of early numeracy and fine motor skills was evident through these activities.

AWW's sensitivity and recognition of children's interests

In Kharadasing in Gajapati, children were made to sit in a circle, and every child was provided beads and a thread to make their respective necklace. Interestingly, children who refused to be engaged in beading activity were involved in other activities like playing with puzzles and blocks.

Role play and particpation of children

In districts such as Gajapati and Rayagada, children were engaged in role plays. It was seen that children enacted the story Two Goats on a Bridge. In another role play, children depicted reaping of crops, while singing tribal songs. This was because usually those songs were sung during reaping season. These activities promoted social skills, such as taking turns, adhereing to rules of the game and cooperation among children. Planning and transaction of diverse, appropriate and meaningful activities reflect strengthening of AWWs' skills and knowledge. Innovative activities which lead to holistic development of children were well planned and organized.

Shift from rhymes and songs routine to higher order skills

In one of the Anganwadis, an activity of exploratory nature was observed. AWW asked the children to form a semi-circle. Meanwhile, she collected materials such as a bucket filled with water, few balls and marbles and organized an activity for children. She asked children to pick up balls and marbles one at a time and drop them in the bucket. All children got an opportunity to participate and were excited to drop the marbles and ball in the bucket. After dropping the ball and marbles they observed what happened to them. Subsequently, the AWW explained why marbles sank while plastic balls were floating. Different versions of this activity were observed in various Anganwadis.





The envisaged partnership between Government of Odisha and BvLF to scale up the model of mother tongue based multilingual early childhood education was a well planned strategic decision. MTELP+ programme was envisaged with an objective to strengthen the existing government machinery both at macro and micro level to ensure that the interventions are meaningful, cost-effective and sustainable. The Project worked with block, district and state governments on priority issues as identified by them. The Project team used respectful and collaborative approaches which built trust and ensured local ownership and commitment to the interventions.

The political will was one of the significant factors to ensure the success of the MTELP+ programme. The findings from the evaluation are illustrative of the effectiveness of outcomes in terms of gains in capacities, knowledge and skills of ICDS functionaries. The accomplishments from the MTELP+ programme inform that the interventions were progressing in the right direction; nonetheless this was just a beginning. Committed and sustained efforts are required to ensure that the positive outcomes of the MTELP+ programme last. Continuous support and efforts from ICDS functionaries will be required to sustain the significant improvements in early learning and holistic development in early years. Moving forward, the Government may need to ensure that these positive shifts continue to become better and sustainable. Creating an environment that is respectful of indigenous languages and culture will go a long way in ensuring a quality learning environment and preserving the languages, context and culture of tribal communities.

Recommendations

Recommendation # 1: Investment and Innovative Strategies to Strengthen, Scale and Sustain the MTELP+ Interventions

- Introduction of language policies to ensure that the early learning is carried out in
 mother tongue and before moving to second language the children have gained
 competence over their mother tongue. The second language needs to be introduced
 gradually with trained ICDS functionaries to ensure seamless process of transition.
- A dedicated trained ECCE workforce is required for monitoring and strengthening the
 ongoing existing platforms and programmes of ECCE. Given the existing strengths of
 the PMU personnel and personnel with similar skills it will be prudent to utilize their
 capacities to strengthen and sustain the MTELP+ programme. Additionally, the

- capacities of LS need to be strengthened to continue and sustain the continuous monitoring and hand-holding of the AWWs.
- The good practices and learning from MTELP+ programme are ample, but it needs to be reiterated that this is just the beginning to ensure quality ECCE in the state with a special focus on far reached areas, that often are neglected because of difficulty in access. The learning(s) and activities pertaining to ECCE (early learning, brain development, Mother Tongue based multilingual education, partnership with parents and community) need to escalated at various levels and with other districts to ensure quality early education across the state of Odisha.
- Promoting platforms for reward, recognition and promotion for ICDS functionaries can go in a big way in motivating and sustaining quality in programme. The ECCE day, sector meetings can be a few platforms where the AWWs and Supervisors can be recognized for their valuable, committed and innovative contributions. Good experienced and seasoned AWWs can be promoted to Supervisors or their expertise can be utilized in training. These platforms can also be utilized to applaud the efforts of parents and community members who are engaged with Anganwadis and support by volunteering at the Anganwadis or preparing contextual TLM for children.
- Continue to invest in mother tongue based early learning by allocating specific budgets for the indigenous populations who have witnessed exclusion for several years.

Recommendation # 2: Strengthening of Existing Government Training Modules for ICDS Functionaries

- Existing Government training modules and curriculum need to be reviewed for inclusion of important topics. The modules developed and utilized for the MTELP+ programme are tested and validated. The specific components can be utilized to strengthen the existing training modules for ICDS functionaries.
- Existing Government training modules on job course and refresher trainings need to be strengthened on aspects like ECCE, mother tongue based multilingual education, early learning and brain development. The component on Parental engagement needs to be strengthened in the Modules developed in MTELP+ programme and once tested should be incorporated in the Government training modules.

Recommendation #3: Continuous and Regular Refresher Training

Given the AWWs are selected from community which ensures that they know the mother tongue and can transact the curriculum in mother tongue implies that majority of AWWs will have low education qualifications (nearly three-fourth of the AWWs had barely managed secondary school or even less). Hence, to ensure a quality ECE programme, systematic, regular trainings, refresher trainings and follow up sessions will be essential. Similar recommendations were received from experts.

In addition to the first training, trainings need to be provided in a recurrent fashion so that first, basics are clear to the trainees and then they proceed towards attaining in-depth understanding about philosophies, content and methods of ECCE. Any training planned by sponsorship should not be a one-time event and ought to be organized recurrently (Expert feedback and recommendations).

Some of the future trainings can include capacity building on:

- Orient the trained ICDS functionaries to further pass on skills and knowledge to their counterparts (service providers) in other tribal dominated blocks.
- Strengthen skills of Supervisors and CDPOs on training, mentoring and supportive supervision.
- Strengthen skills for domain specific activities (organization and planning of new and innovative activities on indoor play, clay and sand activities, colouring/ craft work and higher order learning like sequencing, seriation. Building capacities and skills on early numeracy and early writing can be re-visited as it is one area which is relatively new and complex for the AWWs to assimilate.
- Build on skills for Organization and Planning (Anganwadi environment, display of charts, display of children's materials, prior planning of activities and TLM to be used for planned activity).
- Encourage AWWs to make a shift from teacher directed activities to children initiated activities where children are active agents and receive opportunities to construct knowledge as per their interests, promoting interactions between AWWs and children (encouraging children to choose among activities, ask questions, positive reinforcement).

- Augment skills for assessment of children to improve and reflect on teaching learning and transaction processes.

Recommendation #4: Feedback from Experts on Training Modules

- An exposure visit to a typical Anganwadi should be scheduled just after the icebreaking session, on the first day or on third day. Also, reflection and discussion session should follow the exposure visit to Anganwadis. These illustrative examples from field will lead to discussions and can make excellent 'discussion points' for introducing apt and conducive ECE classroom practices and eliminating inapt existing practices. This would allow participants to understand the objectives and relevance of the trainings and would further allow them to develop realistic expectations (Expert feedback and recommendations).
- A transformational approach is recommended. This includes a series of trainings each with a limited objective as part of the series, to bring more effectiveness and depth into the training. The duration of training needs to be extended. This would ensure that Master Trainers gain sound understanding and hands-on skills on ECCE, to be effective trainers. This needs to be institutionalized at the level of the DWCD of the state as a mandatory requirement. Both CDPOs and Supervisors may be made to discharge their role of supportive supervision. A District officer may be assigned the responsibility to oversee its implementation (Expert feedback and recommendations).
- The focus on mother tongue was quite diluted across modules. Specific recommendations on how use of various mother tongues during day to-day transactions with children, was found to be missing (Expert feedback and recommendations). The ICDS functionaries need to be trained on interactive teaching methods that facilitate emergent literacy skills, thus the child friendly acquisition process of early reading and writing skills utilizing the mother tongue based early learning approach.
- After each section of the module, incorporating short assignments would assist in gauging whether the trainees were able to absorb various concepts (Expert feedback and recommendations).
- Dimension of 'time management' was addressed in a limited fashion. The skill of time management will enable the LSs and AWWs to devote quality timing to ECE,

besides delivering other five services of ICDS. Therefore, time management skills have to be incorporated in all the trainings (Expert feedback and recommendations).

Recommendation # 5: Exploring Strategies to Address Anganwadis with Multiple Mother Tongue

- Exploring strategies to address the challenges of Anganwadis having children with more than one mother tongue is warranted. The MTELP+ intervention focused on monolingual Anganwadis, however there are many Anganwadis where children with multiple mother tongue exist. One of the strategies, where the AWWs can speak one tribal language and a helper speaks another tribal language can be employed. Another option could be to engage volunteers from community (parents, adolescent girls or boys) who are willing to take turns to participate and support the Anganwadis. This will ensure the language diversity in Anganwadis, create a true multilingual environment and ascertain that all the children enrolled in the Anganwadis get to hear and are able to communicate in their mother tongue.
- Introduction to a second language and the process of introduction of second language needs to be incorporated and added to training component.

Recommendation # 6: Training to Reach the Last Mile of Anganwadis: The Helpers

• In addition to training of AWWs, trainings need to be planned and organized for Anganwadi Helpers. While the Baseline did consider the option for exploring the needs of helpers, they were not included in the MTELP+ training. Many alternate models have included training of helpers to support the ECE services of Anganwadis and have shown promising results. On many occasions it is observed that the AWWs are assigned administrative duties, they have to attend sector, district meetings. The helpers can be trained with skills to equip them conduct basic activities (story-telling, indoor games, guided conversations) with children rather than having no activity during the absence of AWWs.

Recommendation # 7: Supporting the Development of Developmentally Appropriate and Contextual TLM

The availability and utilization of TLMs brings joy, curiosity and a medium to explore
for children. The Anganwadis need to be provided with adequate materials to ensure
that the children are able to engage in activity based learning. While procuring the

TLM from the market one should be mindful and identify and select contextual TLM. In addition more and more trainings to develop innovative materials should be organized. While developing materials engaging with parents and community will be beneficial and it should be an integral component for the future trainings.

- Developing TLMs in mother tongue and ensuring a print rich environment fostering
 Early Literacy and Numeracy is important. Along with this designing, printing story
 books for children that are age and contextually appropriate, will provide a boost to
 children's learning.
 - Training and workshops can be organized for the AWWs, parents and community to come together and create contextual story books for children. These initiatives will be reflective of the context and will be a step towards sustaining the culture. A mix of picture books and story books with one line text and an increase in order of complexity can be developed. This will not intimidate the parents who may be illiterate and can effectively conduct story sessions using pictures.
 - Creating libraries or mobile libraries in Anganwadis will facilitate access to self created, colourful and inviting story books for children. It will be further helpful if parents get opportunities to issue the books from library, take them home and organize story telling sessions with their children.

Recommendation #8: Mentoring and Supportive Supervision need to be given Priority

• The MTELP+ programme showcased the important role of supportive supervision and this was a commendable effort. The review of literature informs that while a number of policy documents have emphasized the benefits of regular mentoring and supported supervision, opportunities for promoting mentoring and supervision in field are largely limited or go missing. Barely a couple of funded projects have implemented interventions for mentoring and supervision and the positive impact is visible. As a part of MTELP+ programme visits to Anganwadis and regular sector meetings, were used to build capacities of AWWs. Mentoring and supportive supervision are significant aspects that need to be continued and strengthened as a good practice from MTELP+ programme.

Recommendation # 9: Awareness Generation for Parents and their Continuous Engagement

- The commitment from MWCD, GOO to ensure quality ECCE in Anganwadis is laudable as they acknowledge the importance to sensitize parents and community to ensure the children receive adequate nutrition and early stimulation. These efforts will provide positive stimulating experiences to the children, and hence promote optimal brain development. The government also affirms the encouragement of parents and community to partner in ECCE activities and preparing TLM.
- While the MTELP+ programme made significant progress in majority of its activities, the efforts to make Parents+ programme robust continue. Given the low literacy levels of parents, it will be valuable and important to continue building relationships with parents and community. The recently launched Parents+ module for strengthening the component of parent engagement for ICDS functionaries, specifically the AWWs with a focus on children in age group of 0-3 years are commendable efforts by the MWCD, GOO and BvLF to ensure fidelity of parental involvement. The parents+ modules developed for AWWs along with the proposed trainings will strengthen the parents+ component and thus sensitize parents towards mother tongue based early learning. Generating awareness and involving them as worthy contributors to the Anganwadis will require further committed and sustained efforts. These ongoing efforts necessitate a comprehensive evaluation at the end of MTELP+ implementation. The good practices that emerge from these interventions will provide valuable evidence for the ECCE fraternity.



References

- 1. Arnold, C., Bartlett, K., Gowani, S., & Merali, R. (2006). *Is everybody ready?* Readiness, transition and continuity: Reflections and moving forward. Background paper for EFA Global Monitoring Report 2007.
- 2. Ball, J. (2010). Enhancing learning of children from diverse language backgrounds: Mother tongue-based bilingual or multilingual education in early childhood and early primary school years. Retrieved from http://eyeonkids.ca/docs/files/unesco_mothertongue_based_ey_2010.pdf(Accessed on 27th May, 2019)
- 3. Benson, C. (2005). The Importance of mother tongue-based schooling for educational quality; Background paper for the Education for all global monitoring report 2005.Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000146632 (Accessed on 27th May, 2019)
- 4. Benson, C., & Kosonen, K. (Eds.) (2013). Language issues in comparative education: Inclusive teaching and learning in non-dominant languages and cultures. Rotterdam: Sense Publishers.
- Heugh, K. & Mulumba, B.M. (2013). An Evaluation of the Literacy and Basic Education (LABE) Mother-Tongue Education (MTE) Project: Final Report. Retrieved from https://africaeducationaltrust.org/wp-content/uploads/2014/07/2013-LABE-Mother-Tongue-Education-Report.pdf
- 6. Knowles, M.S., Holton, E. F., & Swanson, R.A. (2012). The Adult Learner [Google book version]. Retrieved from https://books.google.co.in/books?id=mTFiCcjqKr8C&printsec=frontcover&dq=malcolm+knowles+theory+of+andragogy&hl=en&sa=X&ved=0ahUKEwiRreWMjfblAhX
 DeisKHQkPBkkQ6AEILjAB#v=onepage&q=malcolm%20knowles%20theory%20of
 %20andragogy&f=false
- 7. Kosonen, K. (2005). Education in local languages: Policy and practice in Southeast Asia. First languages first: Community-based literacy programmes for minority language contexts in Asia. Bangkok: UNESCO Bangkok.
- National Council of Education Research and Training. (2019). The Preschool Curriculum. Retrieved from http://www.ncert.nic.in/pdf files/preschool curriculum.pdf

- 9. Mohanty A. K. (2008). Perpetuating inequality: Language Disadvantage and Capability Deprivation of Tribal Mother Tongue Speakers in India. In Harbert W., with help from McConnell- Ginet, S., Miller, A., & Whitman J. (Eds.), *Language and Poverty*. Retrieved from <a href="https://books.google.co.in/books?hl=en&lr=&id=li-THCGAuYcC&oi=fnd&pg=PA102&dq=Perpetuating+inequality:+Language+disadvantage+and+capability+deprivation+of+tribal+mother+tongue+speakers+in+India&ots=ZFwEC7eagf&sig=krWrlxx_M3YFRB8zTEgBFj4A0oM#v=onepage&q&f=falseMAHORTY"
- 10. Mohanty, A., & Skutnabb-Kangas, T. (2013). Mle as an economic equaliser in India and Nepal: Mother tongue based multilingual education fights poverty through capability development and identity support. Studies in International Minority and Group Rights, 6. 159–187.Retrieved fromhttps://s3.amazonaws.com/academia.edu.documents/33745462/Mohanty Skutna bb-Kangas FINAL 15 November 2011.pdf?response-contentdisposition=inline%3B%20filename%3DMLE as an economic equaliser in India an.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20190917%2Fus-east-1%2Fs3%2Faws4 request&X-Amz-Date=20190917T162503Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=314af5ed2d9a38ffe558c0f6e0544c281c4627ed0ca207c0253b048ce7464bc d(Accessed on 27th May, 2019)
- 11. Panda, M., Mohanty, A., Nag, S., & Biswabandan, B. (2011). Volume 1, Issue 6-7 SWARA SWARA SWARA A Symphony of Liberating Voices, *1*(6).Retrieved from file:///C:/Users/CECDR%2001/Downloads/Does_MLE_work_in_Andhra_Pradesh_andOdis%20(1).pdf (Accessed on 23rd July, 2019)
- Pratham Education Foundation. (2018a). *Programs*. Retrieved from http://www.pratham.org/programmes/9-uncategorised/247-early-years-programme (Accessed on 20th November, 2018)
- 13. Pratham Education Foundation. (2018b). *About Us.* Retrieved from http://www.pratham.org/about-us/about-pratham (Accessed on 20th November, 2018)