LEARNING OUTCOMES OF CHILDREN AND TEACHERS' ATTITUDE AND SKILLS ON MOTHER TONGUE - BASED MULTILINGUAL EDUCATION

A Rapid Assessment
in Odisha and Andhra Pradesh

CREDITS

RESEARCH AND WRITING
Rakesh K Singh, Ph.D

EDITORIAL SUPPORT
Sharon Ferdinands

SPECIAL SUPPORT
Rama Rao, Shiv Patnaik and team – SOVA
Gauri Shankar Patnaik, Hyma and team - Nature

New Education Group – Foundation for Innovation and Research in Education (NEG-FIRE)

Published in February 2017
FOR PRIVATE CIRCULATION ONLY

CONTENTS

FOREWORD

Even after 70 years of being an independent country, India has not been able to ensure that children from our tribal communities have access to schools and to quality education. With drop-out rates as high as 30% before completing class 5 and 62% before completing class 10 (which is higher than it is for the girls of our country), most of these children end up becoming child laborers or getting stuck in the web of illegal or conflict groups/armies.

At the same time we also witness today an explosive demand for education among the most marginalised in the country. With unwavering faith in the education system, they are persistently sending their children to schools, making enormous sacrifices in the process. More and more people, each day, are claiming their right to education which is so precious and essential to live a life full of dignity, respect and equal opportunities. They do so because they value education and are now aware and sensitised of the numerous benefits of education and it is this faith and belief in the value that education adds to their lives that adds strength to the education sector in our country.

This publication titled 'Learning Outcomes of Children and Teachers' Attitude And Skills On Mother Tongue-Based Multilingual Education-A Rapid Assessment in Odisha and Andhra Pradesh (2017) by New Education Group – Foundation for Innovation and Research in Education (NEG-FIRE) resonates with the aspiration of the tribal parents for educating their children. It demonstrates how the relentless intervention of highly motivated facilitators of NEG-FIRE' partner organisations SOVA (Odisha) and Nature (Andhra Pradesh) in implementing Mother Tongue-Based Multi-Lingual Education (MTB-MLE) at Potangi (Koraput) and Dumbriguda (Vishakhapatnam) blocks since 2008-2009, has made a remarkable difference to the enrolment, retention and participation levels of children in schools.

The Report clearly highlights the joy of the teachers who taught the children in their mother tongue - as one of them clearly states, 'When I use Odiya (the state language), I get blank stares from children, until I start using the mother tongue to facilitate comprehension'. When teachers say, "Children really need visual aids and story books with colourful pictures....the MTB-MLE materials provided to us help children in reading and writing. The picture cards, word cards, sentence books, story books in their mother tongues are a big help, children easily understand if they are able to identify pictures with descriptions given in their mother tongue", it demonstrates both their professionalism and their empowerment. More than anything else, the report tells us how well children are able to articulate, speak, read, write and tell stories when they are taught in a language which is so dear to them. This foundational process of education in mother tongue introduced by NEG-FIRE has charged them with self-confidence and dignity and has made the learning process easier and this` enables these tribal children to move on from one class to another with limitless possibilities for their future.

The report, most importantly, documents the concrete steps taken to put into concrete practice the principle of inclusion that is reiterated in every education policy document. The battle for equality can be won only through an inclusive form of education that respects tribal children. Further, it must be emphasised that education is the only path that gives them access to a web of networks and the wherewithal to deal with power structures and authority thus ensuring a better and brighter future. The report both validates the fact that education is indispensable for rendering justice to our tribal children and offers feasible interventions for making this possible.

Prof. Shantha Sinha
First Chairperson (2007-2013)
National Commission for Protection of Child Rights, Govt. of India

LIST OF TABLES

LIST OF CASE STUDIES

LIST OF FIGURES

GLOSSARY

ASER: Annual Status of Education Report

AWC: Anganwadi Centre

FGD: Focus Group Discussion

GCE: Global Campaign for Education

MLE: Multi Lingual Education

MTB: Mother Tongue-Based

MTB-MLE: Mother Tongue-Based Multilingual Education

NCF: National Curriculum Framework

NEG-FIRE: New Education Group – Foundation for Innovation and Research in Education

RTE: Right to Education

SOVA: South Orissa Voluntary Action

TLM: Teaching Learning Material

WRIP: Writing and Reading Improvement Plan

CHAPTER 01

INTRODUCTION

Numerous studies have shown that children receiving education in their mother tongue in early grades have better learning outcomes and also significantly better literacy levels .This has also been suggested and recommended in The National Policy on Education 1986, Input Document on Draft National Education Policy (2016), National Curriculum Framework (NCF) 2005 and the Right to Education (RTE) Act, 2009.

NEG-FIRE, in association with SOVA (Koraput, Odisha) and Nature (Vishakhapatnam, Andhra Pradesh), the two partner organisations, has been promoting Mother Tongue-Based Multi-Lingual Education (MTB-MLE) at Potangi (Koraput) and Dumbriguda (Vishakhapatnam) blocks, respectively. A number of valuable TLMs and MTB-MLE materials have been developed such as WRIP (Writing and Reading Improvement Plan), Word Books, Sentence Books, and Stories, among others, in six (6) local languages – three (3) each at Potangi (Kuvi, Gadaba and Paraja) and Dumbriguda (Adivasi Odiya, Konda and Kui).

The current intervention is the third phase of NEG-FIRE and partner organisations' effort to ensure quality education through MTB-MLE in in Odisha and Andhra Pradesh, which first started from 2008-2009. The broad strategies so far, apart from mobilising community responses and awareness generation on programmes, schemes and entitlements, have mainly consisted of working with formal schools, teachers, functionaries, etc., increasing children's attendance and participation in schools, introducing and further refining MTB-MLE materials and methods and upscaling efforts through networking. It specifically addresses the problems of unmet

teacher training requirements and non-availability of trained school teachers in region by developing model schools and AWCs covering all the clusters and hamlets around them. Rest of the schools and AWCs in the block are expected to emulate these models, with help from a team of master trainers, who in turn give training on use of MLE materials and tools.

It is hoped that the these tools and materials in classroom transactions in classroom transactions and capacity building of school teachers on MTB-MLE are resulting in improved learning outcomes of children in the intervention areas. In order to assess improvement in learning outcomes during the current phase of the intervention, a baseline survey was conducted as soon as the projects started both at Potangi and Dumbriguda. This was to be followed by periodic /other assessments of learning levels of children. Besides, it was felt that in view of the on-going efforts for capacity building of school teachers, it is also important to have a rapid assessment of their current perceptions and abilities to use MTB-MLE materials in classrooms. It is in this context that the present assessment is located.

CHAPTER 02

OBJECTIVES AND METHODOLOGY

OBJECTIVES

The main objectives of the rapid assessment are to:

1. To assess the attitude and skills of school teachers on MTB-MLE
2. To assess the application of MTB-MLE pedagogy practices in schools, and
3. To assess the learning ability of Class III and IV children in intervention areas

METHODOLOGY

The assessment has employed a combination of quantitative and qualitative tools to assess learning ability of children and perception & skills of teachers in the intervention areas who have participated in the assessment processes. Data has been collected from 40 schools (20 each from Potangi and Dumriguda blocks – comprising 10 model and 10 non-model schools), covering 51 classroom teachers and 'all Class III and IV children' aas per the sampling plan in Table 1.

Sample Spread of Target Respondents

The segmentation of target respondents and sample spread of the rapid assessment are illustrated in Table 2.

Assessment Tools

The assessment employed a combination of quantitative and qualitative tools (ASER tools, questionnaire and FGDs) to assess the perception of school teachers about MTB-MLE and learning outcomes of children who participated in the process.

ASSESSMENT AREA

The assessment is confined to Potangi block in Koraput district of Odisha and Dumriguda mandal in Vishakhapatnam district of Andhra Pradesh. Both Dumbriguda and Potangi are tribal dominated blocks, with presence of nearly 94.8 and 62.9 per cent of tribal population, respectively. The major tribal groups in Dumbriguda are Bhagatha, Kondadora, Khond, Kondakapu, Valmiki, Kammara, Gadaba, Kotias, Porja and Nookadora. On the other hand, Potangi is primarily inhabited by Kondha, Gadaba, Paraja, Muka Dora, and Nuka Dora tribal groups. (See Table 3)

There are total 168 schools in Dumbriguda mandal with 146 primary schools, 9 upper primary schools and 13 high schools. On the other hand, Potangi block has total 214 schools, with 131 primary schools, 67 upper primary schools, and 16 high schools.

LIMITATIONS OF THE ASSESSMENT

- Class III and IV children are too young to be interviewed or assessed for their learning abilities. Their response was captured only through participatory *observation techniques*, which is a time consuming process.
- In view of the limited/short period of the assessment, concurrence/ support of competent local authorities for this exercise beforehand was extremely crucial. With their prior permission, SOVA and Nature had to inform the chosen schools and teachers well in advance.
- The field investigators needed to be well versed with/ exposed to local language and customs, so that children could open up and be assessed freely. This made involvement of project staff members all the more important in the assessment processes.
- Teachers interviewed during the assessment process also consist of a few contract teachers teaching Class III and IV, who have not been part either of the two rounds of teachers' training. Expecting such untrained teachers to implement MTB-MLE in their classrooms and have MTB-MLE skills is somewhat unfair.
- The assessment is confined only to Dumbriguda mandal of Andhra Pradesh and Potangi block of Odisha. Its outcome therefore cannot be generalised for the country as a whole.

TABLE 1

SAMPLE SIZE OF SCHOOLS, CHILDREN AND TEACHERS

From	Schools	Children* (Class III & IV)	Teachers
Potangi	20	507 (266+241)	28
Dumbriguda	20	261 (122+139)	23
Total	40	All children present in classrooms	51

* All children present in classrooms (except for Ashram schools at Potangi, where the number of classroom children present crossed beyond 50. In such schools, only 50% of classroom children were randomly selected for learning outcome assessment)

TABLE 2

SAMPLE SPREAD

S.No.	Target Respondent	Methodology	Assessment Tool	Sample Size
1	Children	Quantitative	ASER tool	All Class III and IV children present*
2	Teachers	Quantitative & Qualitative	Questionnaire, FGDs	51

* Except for Ashram schools at Potangi, where the number of classroom children present crossed beyond 50. In such schools, only 50% of classroom children were randomly selected for learning outcome assessment.

TABLE 3

DUMBRIGUDA AND POTANGI BY PERCENTAGE OF ST POPULATION

Block/Mandal	State	District	Total Population	Tribal Population	% of ST Population
Dumbriguda	Andhra Pradesh	Vishakhapatnam	49029	46479	94.8
Potangi	Odisha	Koraput	94994	59748	62.9

CHAPTER 02

MAIN FINDINGS

The main findings of the rapid assessment of teachers' attitude and skills on MTB-MLE, application of MTB-MLE pedagogy practices in schools, and children's learning outcomes are described below:

TEACHERS' PROFILE

Today teachers have to face various and complex challenges - considering specific needs (deficit or talents) for each child, encouraging independent learning, promoting the acquisition and the development of key skills, using a variety of methodologies and technologies in learning, developing critical thinking and opening up to local culture and values. It is therefore important to describe in brief the general profile of teachers who have been part of this rapid assessment, and who are primarily responsible for implementation of MTB-MLE in the assessment areas. (See Table 4)

Data shows that the majority of the teachers are male (83.3% in model schools and 66.7% in non-model schools), trained (79.2% in model schools and 77.8% in non-model schools), permanent (91.7% in model schools and 77.8% in non-model schools) and from tribal community (83.3% in model schools and 70.4% in non-model groups).

Educational background shows that a good proportion of teachers interviewed from the model schools (33.3%) and non-model schools (55.6%) are holding higher secondary degrees only. The proportion of graduate and post graduate teachers in model schools (37.5% and 29.2%, respectively) was higher as compared to that in non-model schools (33.3% and 11.1%, respectively). Needless to say, the educational profile of teachers is often a limiting factor in terms of their skills to implement MT-Based pedagogies and their attitudes towards MTB-MLE.

TEACHERS' ATTITUDE TOWARDS MTB-MLE

For successful implementation of MTB-MLE, teachers need to act as a support, rather than a barrier. Much of the empirical evidence however suggests that teachers have often negative attitudes towards MTB-MLE for various reasons (Paulson, 2012). Incorporating the mother tongue can also be seen as threatening for teachers because they would have to "change what they're doing in the classroom...it's a totally different classroom environment, the kids start asking questions, the kids talk back... all kinds of stuff happens" which changes the way that teaching and learning take place and creates a major role shift from an authoritative figure to facilitator of learning (Bender, as cited in Paulson, 2010). It is in this context that around 172 school teachers from Potangi and Dumbriguda intervention areas, involving both model and non-model schools, have been trained on MTB-MLE to address some of the major identified challenges that teachers face when transitioning into MTB-MLE, including negative attitudes. This section investigates profile of model and non-model school teachers and their perceptions about MTB-MLE.

Around 51 teachers from model and non-model schools were asked their opinion on four MTB-MLE indicators – 1). Children learn best in their mother tongue, 2). MTB-MLE helps children participate in classroom transactions more actively, 3). Children learn state language better with MTB-MLE, and 4). MTB-MLE helps to promote our cultural heritage (See Table 5).

» TABLE 4
GENERAL PROFILE OF TEACHERS (%)

	Model School	Non-Model School	Overall
By Gender			
Male	83.3	66.7	74.5
Female	16.7	33.3	25.5
By Education			
Higher Secondary	33.3	55.6	45.1
Graduate	37.5	33.3	35.3
Post-Graduate	29.2	11.1	19.6
By Community			
Tribal	83.3	70.4	76.5
Non-Tribal	16.7	29.6	23.5
By Training Status			
Untrained	20.8	22.2	21.6
Trained	79.2	77.8	78.4
By Employment Status			
Permanent	91.7	77.8	84.3
Contract	8.3	22.2	15.7
TOTAL (No. of Teachers)	24	27	51

MAIN
FINDINGS

CASE STUDIES

TEACHERS' PROFILE

SIGNIFICANT MALE-FEMALE GAP IN LITERACY AND EDUCATIONAL ATTAINMENT IN DUMBRIGUDA

Potkodi Somiya (M.A, B.Ed) is 31 years old and has been teaching for seven years at MPPS, Jangidivalas (Dumbriguda). Explaining the reason as to why the majority of primary school teachers in Dumbriguda are males, she has this to say: "The literacy and educational attainments of females are significantly low in tribal areas of Andhra Pradesh. The literacy rate among tribal men is 58.3 per cent and among the women is 40.1 per cent". She also attributes the higher proportion of tribal teachers in the region to the deliberate policy decision of the state government during late 1990s, which resulted in appointment of local tribal youths well versed with the local language and culture as primary school teachers, even if they had slightly lower educational qualifications than the rest.

EDUCATIONAL PROFILE OF TEACHERS BOUND TO SHOW IMPROVEMENT

Palamala Hussion (M.A., B.Ed) is a member of Teachers' Resource Group and Head Master of MPPS, Jamuguda. He agrees that educational qualifications of primary school teachers, the majority of which are from tribal communities, are not high. "The government thought, that having teachers belonging to local tribal communities, even though they might have lower educational qualifications, would be good for the education of the tribal children. The minimum educational qualification was thus deliberately kept low, so that more local tribal candidates would be eager. However, with availability of qualified local candidates nowadays, the minimum qualifications have gradually been raised. As the socio-economic conditions are changing fast in tribal areas, the educational profile of teachers is bound to show improvement in the future. These various aspects, including minimum educational qualification of teachers, need to be under constant review," he says.

TEACHERS' ATTITUDE TOWARDS MTB-MLE

TEACHER'S ATTITUDE TRANSFORMED

Tadabariki Rajkumar is the Cluster Resource Person of Killoguda Cluster from Dumbriguda Mandal. "Initially, the school teachers were not interested towards making children learn, perhaps they were tired of convincing them attend classes. Sometimes they would simply stay away from classes and keep the children busy in their own personal work, which surprisingly, children enjoyed. I was very upset about this practice, and would often try and make teachers and parents mend their ways. However of late things have changed in all the model schools where Nature has introduced NEG-FIRE supported MTB-MLE programme. Ever since model schools are implementing MTB-MLE, there is a marked shift in both the learning levels of children and teachers' attitudes. Children now easily understand the words they read because it's written in their mother tongue. If teachers ask them to answer questions, they seem very excited and eager. MTB-MLE is certainly helping children improve their learning levels in model schools. I wish it were implemented in more government primary schools of Dumbriguda".

CHILDREN LEARN BEST IN MOTHER TONGUE

Kasinath Samal is teaching at Lingamguda UGHS, Potangi for about 6 years. As a non-tribal and outsider to the area with an overall 30 years of teaching experience, he is a firm believer that children cannot learn when education is in a language they do not understand. "Unfamiliar language in the classroom disrupts student learning. Whenever I use words that the children are unfamiliar with, they don't understand and in order to help them, I must use the mother tongue" he declares. He gives an example of how language affects learning in classroom: Say for example 'dog' you introduce in Odiya language, some children can recognize what is dog, but some children cannot easily understand what is dog, so you will have to bring it back to mother tongue. I will say '.....' so they can understand, but if you will introduce directly in Odiya language, it is hard for them to understand.

CHILDREN NEED TO ACTIVELY PARTICIPATE IN CLASSROOM TRANSACTIONS TO LEARN

Narayana Majhi, a local tribal youth with a Bachelor's degree, has over 16 years of teaching experience. Currently teaching at Pukali Residential School, Potangi, he sees himself as a facilitator of learning with his goal being to help children comprehend the lessons so that they can actively participate. According to him, there is a "definite connection between MTB-MLE and the increased children's participation and learning outcome that results. Using the mother tongue, as opposed to the state/ official language as medium of instruction, help children to better understand the instructions and lessons. This in turn means that children are able to more actively participate in the classroom activities. When I use Odiya (the state language), I get blank stares from children until I start using the mother tongue to facilitate comprehension". For him, using MTB-MLE thus translates into children who understand what is being said, who can follow instructions and are actively participating, interacting and answering questions, and most importantly, children who are learning.

Not surprisingly, a very high proportion of model and non-model school teachers is having a positive opinion on all the four indicators of MTB-MLE (94.1%, 100%, 94.1%, and 98%, respectively). However, the proportion of non-model school teachers with positive opinion on these indicators is slightly lower (when compared with model school teachers), yet the positivity is very high (See Figure 1).

Thus the intervention and the associated training of model and non-model school teachers on MTB-MLE have successfully addressed the negative attitudes of in-service teachers towards MTB-MLE, which is important for its successful implementation. It also implies that the majority of teachers have become supporters and facilitators of MTB-MLE, rather than barriers.

TEACHERS' SKILL ON MTB-MLE

Positive opinion of school teachers on MTB-MLE is just a facilitating condition for successful implementation of MTB-MLE. Equally important is - school teachers must have either a specific skill set or they should rather acquire or develop it, so that they are well positioned to impart MTB-MLE to the children. Understanding of local language goes a long way to master MT-based pedagogies, and so is the availability of MT-Based TLM. Training of teachers on MT-Based MLE helps them to sharpen their understanding on MTB-MLE. It also results in improving their MT-Based teaching methods. Accordingly, teachers were asked four straight questions – do you understand local language, do you possess MT-Based TLMs, are you trained in MLE, and do you have knowledge of MT-Based teaching methods or not? The results are described Table-6.

The majority of school teachers, both from model schools (91.7%) and non-model schools (81.5%) do have understanding of local language. This is mainly because most of them have tribal backgrounds and they have been locally recruited as well. Teachers with non-tribal backgrounds are also making extra efforts get a grip on MTB-MLE. This certainly helps in better implementation of MTB-MLE in the interventions areas. The data also shows high availability (95.8%) of MT-Based TLMs (as supplied by NEG-FIRE through its partners) with model school teachers. The corresponding figure for non-model school teachers is 51.9% only. This is mainly because many of the teachers who were provided training on MTB-MLE and made available the MT-Based TLMs, have now been transferred to other locations and the newly arrived teachers in their place are yet to possess such TLMs.

As against 87.5% of the model school teachers having been trained in MLE, only 77.8 per cent of non-model school teachers claim to be so trained. The two underlying reasons for absence of cent-per-cent training of school teachers on MTB-MLE, both at model and non-model schools in the intervention areas are again: 1). Transfer of trained teachers to another locations and 2). No training of contractual school teachers on MTB-MLE, which are also part of our respondents. In order to ensure that school teachers do have knowledge of MT-Based teaching methods to help children learn better, it is essential that newly joined teachers and contractual teachers are also part of regular teachers' training on MTB-MLE in both the regions.

FIGURE 1

TEACHERS' OPINION ON MOTHER TONGUE-BASED MULTILINGUAL EDUCATION

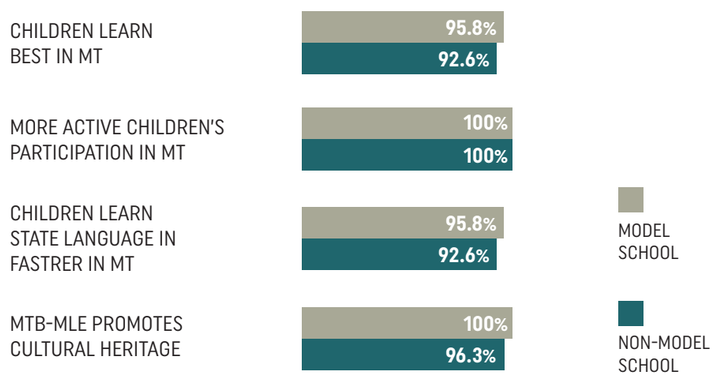

TABLE 5

TEACHERS' OPINION ON MOTHER TONGUE-BASED MULTILINGUAL EDUCATION

	CHILDREN LEARN BEST IN MT	MORE ACTIVE CHILDREN'S PARTICIPATION IN MT	CHILDREN LEARN STATE LANGUAGE FASTRER IN MT	MTB-MLE PROMOTES CULTURAL HERITAGE	N
MODEL SCHOOL	23	24	23	24	24
NON-MODEL SCHOOL	25	27	25	26	27
TOTAL	48	51	48	50	51

TABLE 6

TEACHERS' OPINION ON MOTHER TONGUE-BASED MULTILINGUAL EDUCATION

	UNDERSTAND LOCAL LANGUAGE	POSESS MTB-MLE MATERIAL	TRAINED ON MTB-MLE	AWARE OF MTB-MLE PEDAGOGY	N
MODEL SCHOOL	22	23	21	22	24
NON-MODEL SCHOOL	22	14	21	23	27
TOTAL	44	37	42	45	51

APPLICATION OF MTB-MLE PEDAGOGY PRACTICES IN SCHOOLS

Unless school teachers apply MTB-MLE pedagogy practices in classrooms, training of teachers and providing them with MT-Based TLMs don't help much. So the question is – despite all the trainings and availability of MT-Based learning materials, what is the status of implementation of MTB-MLE in classrooms? To get the answers, teachers were asked four specific questions – 1). Do you communicate with children in their mother tongue, 2). Do you use MTB-MLE materials in classrooms, 3). Do you follow contextual pedagogy practices in classrooms, and 4). Are MT-Based TLMs easy to develop or not?

The proportion of school teachers claiming communication with children in their mother tongue is higher in model schools (95.8%) than their counterparts in non-model schools (88.9) - See Figure 3. On the other hand, as against cent-per-cent use of MTB-MLE materials in classrooms by model school teachers, only 51.9% of their counterparts did so in non-model schools, thus indicating non-implementation of MTB-MLE in non-model schools. This is mainly because non-model school teachers are not bound to use MBT-MLE materials in classrooms and there is no monitoring mechanism in place for the use of such materials in non-model schools/classrooms. Despite this, a high proportion of school teachers in model schools (87.5%) and non-model schools (70.4%) do follow contextual pedagogies as advocated by NEG-FIRE and its partners in the region, which is quite an achievement, often resulting in improved learning outcomes of children in schools.

CHILDREN'S LEARNING ASSESSMENT

To assess the effect of MTB-MLE on the learning outcomes, a learning assessment of reading skills was administered on all Class

MAIN
FINDINGS

CASE STUDIES

TEACHERS' SKILL ON MTB-MLE

MTB-MLE MATERIALS HELP IN TEACHING IN MOTHER TONGUE

Pravati Khemundu, with over 21 years of teaching experience, teaches at Residential Sevashram School, Laudi (Potangi) for the last two years. She views materials as a key to successfully implement MTB-MLE and for children to successfully learn and comprehend the lessons. "Children really need visual aids and story books with colourful pictures.... the MTB-MLE materials supplied by SOVA with support from NEG-FIRE help children in reading and writing. The picture cards, word cards, sentence books, story books in their mother tongues are big help, children easily understand if they are able to identify pictures with descriptions given in their mother tongue," she explains, adding that "non-model school teachers don't have ready-made MTB-MLE materials available with them. This makes teaching in mother tongue a little difficult, especially to those teachers who don't have local backgrounds".

OUR PEDAGOGY NOW INVOLVES DISCOVERING, REINFORCING AND RELATING

Korma Nirmala (MA, B.Ed) is 35 years old and teaching at MPUPS Gorapure, Dumriguda, for the last 4 years. A member of Teachers' Resource Group (TRG), she is proficient in Adivasi Oriya, the local language, as well as in Telugu and English. Explaining the contextual pedagogy practices in schools, she says: "Learning happens best when children are taught in their own environment or context. This is important so that children are able to process new information or knowledge in such a way that makes sense to them, in their own frames of reference". Further elaborating on contextual pedagogy or learning, he says: "In such an environment, there is meaningful relationship between knowledge and practical applications – in the context of the real world around the children. It ensures that age-appropriate concepts and competencies are internalised through the process of discovering, reinforcing and relating".

NOW CHILDREN CAN EASILY LEARN AND UNDERSTAND

Potkodi Chinnayya from the local Kondadora community is the SMC President of MPPS, Jangidivalasa (Dumbriguda). Happy with the NEG-FIRE supported MTB-MLE program, he says: "MTB-MLE is playing an important role in making our children learn and preserve the vitality of our language. Earlier our children could not understand what their teachers were teaching them (in Telugu). They were hesitant in participating and would often escape from the school. As parents, it was hard for us to send them to school, because perhaps they were unhappy inside classroom. But now they are doing much better because they are being taught in a language that they use in their daily lives. I can notice that implementation of MTB-MLE has resulted in children easily learning and understand what is being taught in the classroom. For me, the best thing is children are being provided with colourful books in local Adivasi Odiya, Konda and Kui languages, with lots of pictures in them. Children are now excited to go to school."

APPLICATION OF MTB-MLE PEDAGOGY PRACTICES IN SCHOOLS

DEVELOPING LOCAL TLMS IN MOTHER TONGUE

Ravala Ramakrishna (MA, B.Ed.), a member of Teachers' Resource Group (TRG), has been teaching at MPUPS, Gorapure (Dumbriguda) for the last 4 years. Proficient in Adiwasi Oriya and Kondadora, mother tongues of local tribal children, he says that "NEG-FIRE supported Training of Teachers on MTB-MLE helps Teachers go through the entire process of developing and using word cards, sentence books, story books to teach reading and writing in the mother tongue. They also learn how to make best use of contextualised picture reading and discussion, story-telling, role plays and acting, and other activities developed as MLE materials to be used in the classroom to supplement the textbooks and also to provide more exposure to the state learning outcomes. Teachers are involved in every step of the material development process from writing stories, determining key words, illustrating the stories, even testing them in classrooms. We also spend a significant amount of time discussing and practicing them with our colleagues".

PREPARING TEACHERS FOR THE ROLE SHIFT

Gobardhan Parida, a non-tribal and outsider, but proficient in Desia, the common local language, has been a teacher for over 32 years. For the last 5 years, he is teaching at Upper Primary Seva Ashram, Chandaka (Potangi). According to him, the NEG-FIRE supported MTB-MLE prepares model school teachers for the role shift that occurs in mother tongue classrooms from authoritative figure to facilitator of learning. "This is ensured through making teachers learn good teaching and facilitation practices, something they could follow in their classrooms. These are practices based on what we know about how to help children learn. This includes group work, activity based learning, contextual pedagogy, and experiential learning. Additionally, teachers have the opportunity to create many of the materials they would be using in the classroom and had opportunities to observe those materials being taught as well as to teach themselves in the training environment."

FIGURE 2
MOTHER TONGUE-BASED EDUCATION SKILLS OF TEACHERS (%)

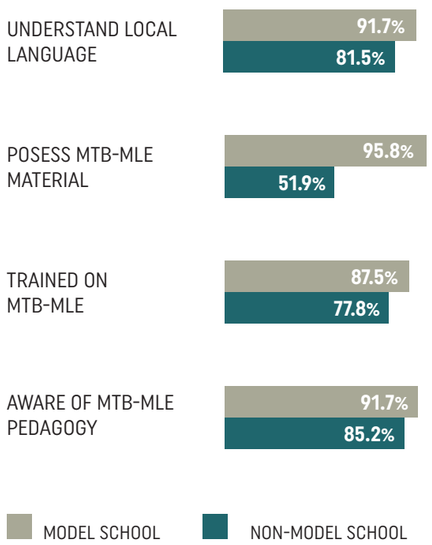

FIGURE 3
TEACHERS' IMPLEMENTATION OF MTB-MLE IN CLASSROOM (%)

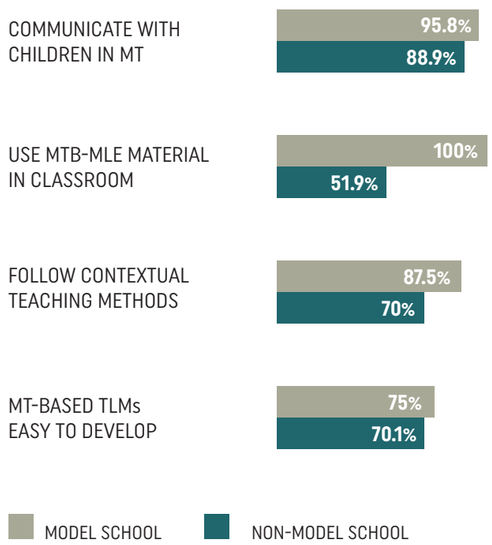

TABLE 7
TEACHERS' IMPLEMENTATION OF MTB-MLE IN CLASSROOM

	COMMUNICATIE WITH CHILDREN IN MT	USE MTB-MLE MATERIAL IN CLASSROOM	FOLLOW CONTEXTUAL TEACHING METHODS	MT-BASED TLMs EASY TO DEVELOP	N
MODEL SCHOOL	23	24	21	18	24
NON-MODEL SCHOOL	24	14	19	19	27
TOTAL	**47**	**38**	**40**	**37**	**51**

III and IV children present* in 40 schools (20 each from Potangi and Dumbriguda, consisting of 10 model and 10 non-model schools). Reading assessment was administered using ASER reading assessment tool. The ASER reading assessment tool normally consists of 4 levels: letters, words, a short paragraph (Class 1 level text), and a longer "story" (Class 2 level text). The child is marked at the highest level which she can do comfortably. The results of the ASER reading assessment are described in Table-8, 9 and 10.

Data shows that the majority of Class III (61.1%) and Class IV (70.9%) Model School Children are either at the paragraph or story reading level (Table-8). The proportion of Class III and Class IV Model School Children at paragraph reading levels was higher at Dumbriguda (47.6% and 50.6%) than at Potangi (14.2% and 19.9%, respectively). However, the proportion of Class III and Class IV Model School Children at story reading levels was higher at Potangi (44.2% and 43.4%) than at Dumbriguda (22.2% and 35.8%, respectively) (Table-9). On the other hand, the majority of Class III (82.7%) and Class IV (54.1%) Non-Model School Children was found to have lower reading levels (either 'nothing', 'letter' or 'word' levels) (Table-8). The proportion of Class III and Class IV Non-Model School Children at paragraph reading levels was only 4.3% and 10.7% at Potangi and 23.7% and 58.6% at Dumbriguda, respectively. Again, the proportion of Class III and Class IV Non-Model School Children at story reading levels was 0% and 14.7% at Potangi and 8.5% and 13.8% at Dumbriguda, respectively (Table-9). The learning assessment of Class III and IV children thus clearly establishes that compared to non-model school children, there has been perceptible improvement in the learning outcomes of model school children, both at Potangi and Dumbriguda.

Learning assessment of Class II and IV children by gender also shows more or less the same trend – that is better learning levels, both for boys and girls, at model schools than at non-model schools (Table-10).

Improved learning outcomes of model school children in reading skills thus further corroborate evidences both from India and abroad which attest to the benefits of learning in mother tongue.

* All children present in classrooms (except for Ashram schools at Potangi, where the number of classroom children present crossed beyond 50. In such schools, only 50% of classroom children were randomly selected for learning outcome assessment)

TABLE 8
LEARNING ASSESSMENT OF CHILDREN (OVERALL)

SCHOOL/ CLASS	LEARNING LEVELS					
	Nothing Level	Letter Level	Word Level	Paragrah Level	Story Level	N
MODEL SCHOOL						
Class 3	14 (5.4)	32 (12.3)	55 (21.2)	58 (22.3)	101 (38.8)	260 (100)
Class 4	0 (0.0)	17 (6.9)	55 (22.3)	74 (30.0)	101 (40.9)	247 (100)
NON-MODEL SCHOOL						
Class 3	36 (28.1)	35 (27.3)	35 (27.3)	17 (13.3)	5 (3.9)	128 (100)
Class 4	21 (15.8)	31 (23.3)	20 (15.0)	42 (31.6)	19 (14.3)	133 (100)
TOTAL						
Class 3	50 (12.9)	67 (17.3)	90 (23.2)	75 (19.3)	106 (27.3)	388 (100)
Class 4	21 (5.5)	48 (12.6)	75 (19.7)	116 (30.5)	120 (31.6)	380 (100)

Figures in brackets represent percentages of totals

MAIN
FINDINGS

TABLE 9
LEARNING ASSESSMENT OF CHILDREN BY CLASS

SCHOOL/ CLASS	POTANGI						DUMBRIGUDA					
	Nothing Level	Letter Level	Word Level	Paragrah Level	Story Level	N	Nothing Level	Letter Level	Word Level	Paragrah Level	Story Level	N
MODEL SCHOOL												
Class 3	14 (7.1)	31 (15.7)	37 (18.8)	28 (14.2)	87 (44.2)	**197 (100)**	0 (0.0)	1 (1.6)	18 (28.6)	30 (47.6)	14 (22.2)	**63 (100)**
Class 4	0 (0.0)	14 (8.4)	47 (28.3)	33 (19.9)	72 (43.4)	**166 (100)**	0 (0.0)	3 (3.7)	8 (9.9)	41 (50.6)	29 (35.8)	**81 (100)**
NON-MODEL SCHOOL												
Class 3	36 (52.2)	26 (37.7)	4 (5.8)	3 (4.3)	0 (0.0)	**69 (100)**	0 (0.0)	9 (15.3)	31 (52.5)	14 (23.7)	5 (8.5)	**59 (100)**
Class 4	21 (28.0)	28 (37.3)	7 (9.3)	8 (10.7)	11 (14.7)	**75 (100)**	0 (0.0)	3 (5.2)	13 (22.4)	34 (58.6)	8 (13.8)	**58 (100)**
TOTAL												
Class 3	50 (18.8)	57 (21.4)	41 (15.4)	31 (11.7)	87 (32.7)	**266 (100)**	0 (0.0)	10 (8.2)	49 (40.2)	44 (36.1)	19 (15.6)	**122 (100)**
Class 4	21 (8.7)	42 (17.4)	54 (22.4)	41 (17.0)	83 (34.4)	**241 (100)**	0 (0.0)	6 (4.3)	21 (15.1)	75 (54.0)	37 (26.6)	**139 (100)**

Figures in brackets are percentages of totals

TABLE 10
LEARNING ASSESSMENT OF CHILDREN BY GENDER

SCHOOL/ CLASS	POTANGI						DUMBRIGUDA					
	Nothing Level	Letter Level	Word Level	Paragrah Level	Story Level	N	Nothing Level	Letter Level	Word Level	Paragrah Level	Story Level	N
MODEL SCHOOL												
Boy	12 (5.3)	24 (10.7)	47 (20.9)	35 (15.6)	107 (47.6)	**225 (100)**	0 (0.0)	1 (1.5)	14 (20.6)	30 (44.1)	23 (33.8)	**68 (100)**
Girl	2 (1.4)	21 (15.2)	37 (26.8)	26 (18.8)	52 (37.7)	**138 (100)**	0 (0.0)	3 (3.9)	12 (15.8)	41 (53.9)	20 (26.3)	**76 (100)**
NON-MODEL SCHOOL												
Boy	23 (35.4)	29 (44.6)	4 (6.2)	3 (4.6)	6 (9.2)	**65 (100)**	0 (0.0)	2 (3.6)	24 (42.9)	25 (44.6)	5 (8.9)	**56 (100)**
Girl	34 (43.0)	25 (31.6)	7 (8.9)	8 (10.1)	5 (6.3)	**79 (100)**	0 (0.0)	10 (16.4)	20 (32.8)	23 (37.7)	8 (13.1)	**61 (100)**
TOTAL												
Boy	35 (12.1)	53 (18.3)	51 (17.6)	38 (13.1)	113 (39.0)	**290 (100)**	0 (0.0)	3 (2.4)	38 (30.6)	55 (44.4)	28 (22.6)	**124 (100)**
Girl	36 (16.6)	46 (21.2)	44 (20.3)	34 (15.7)	57 (26.3)	**217 (100)**	0 (0.0)	13 (9.5)	32 (23.4)	64 (46.7)	28 (20.4)	**137 (100)**

Figures in brackets are percentages of totals

CHAPTER 04

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

- Training of school teachers on basic understanding of MLE and skills of teachers to conduct MLE classes have had a very positive impact on their attitude/perception and skills on MTB-MLE, both at Potangi and Dumbriguda as well as both in model and non-model schools. Thus the intervention and the associated training of model and non-model school teachers on MTB-MLE have successfully addressed the negative attitudes of in-service teachers towards MTB-MLE, which is important for its successful implementation. It also implies that the majority of teachers have become supporters and facilitators of MTB-MLE, rather than barriers.
- The majority of school teachers are trained on MTB-MLE; have tribal backgrounds and they do understand the local language. They have also been provided with MT-Based MLE materials. This certainly helps in better implementation of MTB-MLE in the interventions areas, especially in model schools. However, transfer of trained teachers to another locations and no training of contractual teachers, are proving as barriers for MTB-MLE.
- As compared to model schools, where the application of MTB-MLE pedagogy practices is quite high in terms of communication with children in MT, use of MTB-MLE materials in classrooms and following contextual pedagogy, it is somewhat weaker in non-model schools. This is mainly because non-model school teachers are not bound to use MTB-MLE materials and MTB-MLE pedagogy in classrooms and there is monitoring mechanism in place for the use of such materials and pedagogy practices in non-model schools.
- Learning outcome of Class III and IV children is far better in model schools than in non-model schools, both at Potangi and Dumbriguda. Learning outcome of children by gender also shows more or less the same trend. This means both boys and girls show better learning outcome for model schools than their counterparts in non-model schools.

RECOMMENDATIONS

- The MTB-MLE programme in Potangi and Dumbriguda must be continued and scaled up to include more schools and tribal children from the same and/ or adjoining blocks/ areas subject to availability of resources and feasibility conditions.
- Merely training of teachers on MTB-MLE cannot ensure better implementation of MTB-MLE pedagogy practices in schools/ classrooms and improved learning outcomes of children. It is important that the intervention goes beyond training of school teachers and emphasises more on involvement of teachers and children for better classroom transactions, involving contextual pedagogy, supportive response from teachers and use of innovative practices & MTB-MLE materials in classrooms.
- Since primary school children are being taught both by the regular and contractual teachers, it is important that newly joined teachers and even contractual teachers have knowledge of MT-Based teaching methods and are therefore part of regular teachers' training on MTB-MLE in both the regions.
- Proper monitoring mechanism, with specific roles to project partners and Government officials, followed by appropriate measures to address gaps and other requirements, needs to be incorporated into the overall programme structure for better outcomes. Documentation of case studies, problems and issues will also help in taking corrective measures on time.
- Greater engagement with State Government officials at the block, district and state levels, who are responsible for implementation of MTB-MLE in their respective regions, is essential to make MTB-MLE intervention a greater success. Government support is also required in provisions such as teacher deployment and delivery of resources.
- Both teachers and children are critical elements determining the success or failure of MTB-MLE intervention. Therefore, MT-Based MLE materials should be provided both to the teachers and children on time.

BIBLIOGRAPHY

1. Global Campaign for Education (2013), Mother-Tongue Education: Policy Lessons for Quality and Inclusion, Johannesburg, South Africa
2. L. Mitchell, C Wylie and M. Carr (2008), Outcomes of Early Childhood Education: Literature Review, New Zealand Council for Educational Research, Ministry of Education, New Zealand
3. Learning Indicators and Learning Outcomes at the Elementary Stage (2014), National Council for Educational Research and Training, MHRD, Government of India, Delhi
4. Learning Outcomes at Elementary Stage (2016), National Council for Educational Research and Training, MHRD, Government of India, Delhi
5. National Curriculum Framework (2005), National Council for Educational Research and Training, MHRD, Government of India, Delhi
6. National Multilingual Education Resource Consortium (2009), Why Mother Tongue-based MLE, Zakir Hussain Centre for Educational Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi
7. Paulson Stone, Rebecca (2010), Enhancing learning through the use of mother tongue language: Analysis of the forces for and against mother tongue education, Comprehensive Exam, University of Massachusetts Amherst
8. UNESCO (2007), Mother Tongue-based Literacy Programmes: Case Studies of Good Practice in Asia, Bangkok
9. UNESCO (2011), Enhancing Learning of Children from Diverse Language Backgrounds: Mother Tongue-based Bilingual Education in the Early Years, France

ANNEXURE

LIST OF SCHOOLS

SLNO	NAME OF THE SCHOOL	School Type	Block/State
1	Rallegada UGHS.	Model Schools	Potangi, Odisha
2	GangarajPur UGHS.	Model Schools	Potangi, Odisha
3	Laudi R.S.	Model Schools	Potangi, Odisha
4	Kusuma.UGHS.	Model Schools	Potangi, Odisha
5	Thuria UPS.	Model Schools	Potangi, Odisha
6	Lingamgudi UGHS.	Model Schools	Potangi, Odisha
7	Chandaka Seva Ashram	Model Schools	Potangi, Odisha
8	Amphavalli UGHS.	Model Schools	Potangi, Odisha
9	Tala galuru UGHS.	Model Schools	Potangi, Odisha
10	Pukali R.S.	Model Schools	Potangi, Odisha
11	Karanjaguda NPS.	Non-Model Schools	Potangi, Odisha
12	Guntha NUPS	Non-Model Schools	Potangi, Odisha
13	Ganjaipadar NUPS	Non-Model Schools	Potangi, Odisha
14	Kotavalasa NPS.	Non-Model Schools	Potangi, Odisha
15	Ek Galuru NUPS.	Non-Model Schools	Potangi, Odisha
16	Pangiguda UPS	Non-Model Schools	Potangi, Odisha
17	Taangini UPS	Non-Model Schools	Potangi, Odisha
18	Sendhai UPS	Non-Model Schools	Potangi, Odisha
19	Rellagada NPS	Non-Model Schools	Potangi, Odisha
20	B.Dakiriguda NPS	Non-Model Schools	Potangi, Odisha
21	Jagdivalasa MPPS	Model Schools	Dumriguda, A.P.
22	Nimmagedda MPPS	Model Schools	Dumriguda, A.P.
23	Pedda Anjoda MPPS	Model Schools	Dumriguda, A.P.
24	Domagai GPS	Model Schools	Dumriguda, A.P.
25	Gorrapur GUPS	Model Schools	Dumriguda, A.P.
26	Jogiguda MPPS	Model Schools	Dumriguda, A.P.
27	Sagara MPPS	Model Schools	Dumriguda, A.P.
28	Panthalachintha MPPS	Model Schools	Dumriguda, A.P.
29	Korrai Kothavalasa MPPS	Model Schools	Dumriguda, A.P.
30	Bilaput MPPS	Model Schools	Dumriguda, A.P.
31	Mugiriguda GPS	Non-Model Schools	Dumriguda, A.P.
32	Jamguda MPPS	Non-Model Schools	Dumriguda, A.P.
33	Padalaputtu MPPS	Non-Model Schools	Dumriguda, A.P.
34	Similiguda (s) GPS	Non-Model Schools	Dumriguda, A.P.
35	Gasaba GPS (TW)	Non-Model Schools	Dumriguda, A.P.
36	Panasaputtu MPPS	Non-Model Schools	Dumriguda, A.P.
37	Korra UPS	Non-Model Schools	Dumriguda, A.P.
38	Musirigondhiguda MPPS	Non-Model Schools	Dumriguda, A.P.
39	Rangivalasa MPPS	Non-Model Schools	Dumriguda, A.P.
40	China Anjooda MPPS	Non-Model Schools	Dumriguda, A.P.

OUR VISION

NEG-FIRE aims to transform the lives of children from marginalised communities through education and by strategic partnership with local NGOs and community groups.

OUR MISSION

We promote quality education for children from marginalised communities resulting in social transformation in India while upholding the values of transparency, accountability, pluralism, equity, justice, peace and respect for all.

Design: mustardtree.in

MISEREOR
IHR HILFSWERK

New Education Group
Foundation for Innovation and Research in Education
A-1, Third Floor, Sarvodaya Enclave
New Delhi- 110017
Telefax: +91 11 26526570
Email: info@negfire.org

www.negfire.org