



Reading solutions for girls

Combating social, pedagogical, and systemic issues for tribal girls' multilingual education in India

Suman Sachdeva

THE ECHIDNA GLOBAL SCHOLARS PROGRAM

The Echidna Global Scholars Program is a visiting fellowship hosted by the Center for Universal Education (CUE) at Brookings that works to catalyze and amplify the work of leaders in girls' education from developing countries. The Echidna Global Scholars are selected through a rigorous, competitive selection process and spend nearly five months in-residence at Brookings on research-based projects and collaborating with colleagues on issues related to global education policy, with a particular focus on girls' education. Upon return, Echidna Scholars may implement projects with their home institutions based on their research findings and join the Echidna Alumni network. For more information on the Echidna Global Scholars Program, please visit: www.brookings.edu/globalscholars.

Support for this research and the Echidna Global Scholars Program is generously provided by Echidna Giving. Brookings recognizes that the value it provides is in its absolute commitment to quality, independence, and impact. Activities supported by its donors reflect this commitment and the analysis and recommendations are solely determined by the scholar.

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars.

ACKNOWLEDGEMENTS

This policy paper has constructively utilized the opportunity provided to me to build a fresh perspective on girls' education in India and place it on a global platform with the support of the Center for Universal Education and Echidna Giving. I thank them for providing the resources and guidance to develop this paper through engagement in high-level intensive dialogues and debates, participation in various events, and discussions with technical experts in the area of girls' education. I acknowledge the richness that the CUE team environment has brought to my experience and for providing a "home away from home."

This journey of five months was possible only through complete support from my organization, CARE India, which works toward the goals of overcoming poverty and ensuring a life of dignity and security for marginalized populations by facilitating the empowerment of women and girls from poor and marginalized communities.

I sincerely thank Christina Kwauk who anchored exceptional technical support and Bridget McElroy for sorting out and smoothing the processes, and identifying and tying up various learning platforms to enlighten the paper. I thank Rebecca Winthrop, Jeni Gamble, and Kate Anderson for enriching the paper through in-depth discussions, pertinent feedback, and for challenging and supporting the thoughts in the paper. My sincere appreciation goes to the entire CUE library team, which met all requests for any resource with great efficiency and promptness.

I thank my education team in CARE India who painstakingly contributed to build the research evidence in the area of early grade reading and held the fort in my absence. I thank Prof. Venita Kaul, Prof. Minati Panda, Prof. Namita Ranganathan, Meenal Sarda, Ambarish Rai, Prof. Gauri Srivastava, and Prof. Avinash Singh for encouraging me to pursue this work and for helping me develop an understanding of the country-specific challenges in this domain.

I am deeply touched by the support of my family and children who energized me to continue this journey with passion and commitment, and my friend who stood firm with me as I lived away from my home and work for five months.

Contents

Introduction
Marginalization in India: A brief overview
Language is power, but not for indigenous languages
The right to education in India does not mean the right to be taught in one's language . 3
MLE issues impair tribal children, especially girls
Gender gaps in MLE policy
Girls may be reading, but they are not comprehending what they read
Solutions for girls' reading
Solution 1: Address impeding social issues
Solution 2: Focus on comprehension in pedagogy
Solution 3: Construct reading experiences as per gender differences
Solution 4: Prioritize assessment and indicators for girls
Solution 5: Strengthen platforms for MLE-for-tribal-girls
Solution 6: Accommodate tribal girls in MLE policy
Appendix
Three-language formula
Multilingual education pilot Odisha
Bibliography 17

Reading solutions for girls

Combating social, pedagogical, and systemic issues for tribal girls' multilingual education in India

Suman Sachdeva



INTRODUCTION

The current multilingual policy in India is insufficient for the acquisition of early grade reading skills by tribal girls. Unable to overcome the social and pedagogical barriers of multilingual education, they are denied the right to an education that empowers them and builds their capacity to negotiate for their rights within their communities and in the larger world.

The problem with delivering effective multilingual education (MLE) for tribal students is that where tribal populations are substantial¹ (more than 30 percent of the local population) and where there are more than three dialects, the current MLE approach is inadequate. It also does not have a strong enough focus on girls as it ignores their gender-specific educational challenges. The Indian state of Odisha offers a case study² for inves-

tigating this problem because it is not only representative of the tribal population in the country (with 90 percent of scheduled tribes enrolled in its schools), but it is also one of the few states with a multilingual policy³ and with a MLE intervention in 4 percent of its primary schools. Children enrolled in these MLE intervention schools belong to the scheduled tribes that constitute nearly 22.21 percent of the total population in Odisha, with 73 percent of them below poverty line (Haan and Dubey 2003), and some located in specific pockets that have socio-economic indicators among the lowest in the world.

The Odisha MLE program has provided a preliminary foundation for rethinking how multilingual education can enable children from tribal communities to escape the vicious cycle of language disadvantage in India. Lessons from the state's policy demonstrate the need for a strengthened

Suman Sachdeva | India Technical Director Education, CARE India

As a strong promoter of quality education and with a passion for ensuring the provision of quality education to children, especially girls from marginalized settings, Dr. Suman Sachdeva has been working as the technical director of education at CARE India since 2010 leading the Girls' Education Program. Her interests focus on out-of-school girls, leadership, and early grade reading in children. She has over two decades of experience with time spent as a practitioner in elementary education, pedagogy, and research in the areas of gender, child development, and community mobilization. In the past she has worked with the UNICEF Education Section and led an innovative life-skills project with a national NGO in the South Asia working for children in difficult circumstances. Dr. Sachdeva has planned and implemented an integrated education program with a focus on quality education for street and working children, and provided technical support at the country and state levels to programs including Education for All. She holds a Ph.D. in education, a dual master's (M.Ed. and M.Phil.) in education with a specialization in gender studies and child development, and a B.Ed. in education focusing on child development, mental health, and gender studies from the University of Delhi.

approach to MLE in other states with similar marginalized tribal populations.

An analysis of the MLE intervention in this paper, especially Odisha's case study on early grade reading—a language-based skill (USAID 2012, Freire 1981)—indicates that a special focus on tribal girls is necessary in research, policies, and programs. Although evidence suggests there is a small gender gap in reading ability between tribal girls and boys, in general girls are more heavily impacted by inadequate language skills in the short and long term as they become more vulnerable to drop out and thus unable to complete a full course of education. Research indicates that girls' average years of schooling is far less than boys, so what little reading skills a girl acquires in primary school may be all she ever gains (Sperling, Winthrop, and Kwauk 2016). Persistent barriers to multilingualism experienced in the early years of schooling thus have far-reaching consequences for girls; whereas boys may be able to eventually "catch up" as they continue their education.

MARGINALIZATION IN INDIA: A BRIEF OVERVIEW

There are 300 million indigenous people world-wide who are frequently marginalized by the rest of the population. Their human rights are often abused and their poor health and welfare raise serious concern (Subramanian, Smith, and Subramanyam 2006).

In India, there is a deeply embedded phenomenon of exclusion—among caste, class, religion, gender, occupation—rendering some people to be powerless in society. Scheduled tribes (ST), defined partly by habitat and geographic isolation

but more on social, religious, linguistic, and cultural distinctiveness, are among the poorest and most marginalized groups in India (Mohindra et al. 2010, Sachdeva 2013).

LANGUAGE IS POWER, BUT NOT FOR INDIGENOUS LANGUAGES

The societal role of languages and their position in education are intertwined. There exists a double divide in Indian society: first, between the language of the elites and the languages of the masses; and, second, between the languages of the masses and the languages of the marginalized. This divide results in a three-tiered hierarchy of language, with the language of the marginalized at the bottom (and thus with no presence in education), the language of majority (masses) in the middle tier, and the language of the powerful (elite) on top (Mohanty 2008).

The language of the elite becomes a tool of empowerment because it gains social attention and a space in the medium of education. Mastery of this language means those who become proficient in it are enabled to use it to their advantage, directly impacting their educational performance, socio-economic well-being, identity, development, and survival. Those who do not become proficient become disempowered.

The 2001 Census of India estimated there are 1652 mother tongues in the country. After the census, the government clustered them into 122 languages along an ad hoc set of criteria, creating groups of languages with no necessary linkages in script or speech. In addition, despite the fact that Article 350 of the constitution recommends the mother tongue as the medium of instruction

Language
of the elite
(English) with a
dominant role in education

Language of the majority (regional/Hindi) with a secondary role in education

Language of minorities (indigenous) with no presence in education

for linguistic minorities, the government of India approved only 26 out of the 122 languages as the medium of instruction in public primary schools across the country. This means less than 1 percent of tribal children in India have an opportunity to be educated in their mother tongue (Jhingran 2009).

Less than 1 percent of tribal children in India have an opportunity to be educated in their mother tongue.

formula has not been fully adopted by most states.

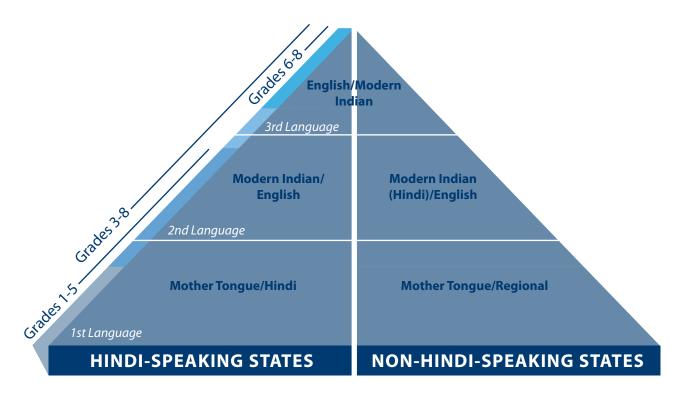
Figure 2 illustrates the three-language formula's suggested use of mother tongue and other languages in the education system of India. In Hindi-speaking states, the formula

suggested the use of the mother tongue or Hindi as the medium of instruction in primary grades, a modern Indian language or English in grades 3 to 8, and English or a modern Indian language (if not used in grades 3 to 8) in grades 6 to 8. In non-Hindi-speaking states, the formula suggested the use of mother tongue or the regional language in primary grades, a modern Indian language (preferably Hindi) or English in grades 3 to 8, and English or modern Indian language (if not used in grades 3 to 8) in grades 6 to 8. As the federal structure of the country allows each state to decide its medium of instruction, this formula was observed as per the desire and intent of the states, resulting in the Hindi-speaking states operating with Hindi,

THE RIGHT TO EDUCATION IN INDIA DOES NOT MEAN THE RIGHT TO BE TAUGHT IN ONE'S LANGUAGE

Year after year, the government has recognized the importance of mother tongue use in primary education and the need to enhance the language skills of children. In response, the government has suggested all states adopt a three-language formula to improve the quality of multilingual education (see Appendix for a historical account on the three-language formula). However, this

FIGURE 2. LANGUAGE OF INSTRUCTION IN THE INDIAN EDUCATION SYSTEM



English, and Sanskrit, and non-Hindi-speaking southern states operating through only a two-language formula. The intention to build students' skills in three languages was not only not pursued, but regional languages in Hindi-speaking states and Hindi in non-Hindi speaking states were also ignored. Moreover, the mother tongue was not used as the medium of instruction in most states.

The National Policy of Education 1986 and the Program of Action 1992 supported some language-related provisions that encouraged some states to initiate multilingual education to address linguistic diversity in education.

Despite a continued focus by the Indian government including the Constitution of India, Kothari Commission report, National Education Policy, and National Council of Educational Research and Training, on the use of MLE in education frameworks and policy documents, this issue continues to be put on the backburner: The landmark

Right to Education Act 2009 did not make it a right of all children to be taught in their own language.

Thus, we find a situation where most states in India not only do not have a MLE policy to accommodate multi-linguistic diversity in schools, but also continue to neglect many languages spoken by minority linguistic communities. In the same spirit, most states continue to use a blanket curriculum, instructional approach, and materials for all students, ignoring differences in social context and gender that would require a more customized approach.

There are a few states like Odisha that have decided to address the multilinguistic realities in a more structured manner. In 2006, Odisha initiated a pilot "MLE-based program"⁴ in 10 tribal languages in around 4 percent of the total primary schools in the state. These schools have at least 90 percent enrollment by students from ST communities (Government of Odisha 2013). The program used mother tongue instruction to strengthen the language skills

of students and to transition them slowly to the dominant or mainstream language, such as Odia and English, by the end of primary schooling. This pilot later informed Odisha's finalized MLE policy, which has the potential to be more effective and adequate for tribal children in other locations as well—although it still misses a focus on girls.

MLE ISSUES IMPAIR TRIBAL CHILDREN, ESPECIALLY GIRLS

Skutnabb-Kangas (2000) finds a correlation between the educational failure of linguistic minorities all over the world and the mismatch between the home language and the language of formal instruction in schools. Moreover, the dominant language becomes an instrument of power for those who are conversant in it, and shame and guilt for others who do not understand it (Mohanty and Reddy 2009).

For example, the majority of children enrolled in non-MLE government schools in Odisha are from tribal communities, primarily speaking Ho, Kondh, Mundari, Kui, and Santhali languages but being taught in Odia. They are largely first generation learners with no support from their parents to understand the "alien" language used in school. Thus they are unable to learn (Karak 2015).

There already exists a learning gap between boys and girls, especially in tribal areas. Ramachandran (2004) identifies a subtle but discernible hierarchy of access to education in India leading to girls falling far behind boys in accessing schools. Similarly, Ghosh and Pal (2007) find that there is a gender gap in enrollment and dropout of female tribal girls in states of India with significant tribal populations. Some qualitative research

has shown that even when girls are enrolled in school their attendance is irregular or they withdraw early due to factors such as lack of parental awareness, lack of institutional support, irrelevant school curricula, and teaching in a language different from her spoken language (Dashora 1995). The enrollment percent proportion of girls in district Mayurbhanj in grades 1, 2, and 4 is around 38 percent compared to the 62 percent that is boys. Thus, more boys than girls are attending school across the early grades (Karak 2015).

In India the ST male literacy rate stands at 59 percent compared to the national male literacy rate of 82 percent (Registrar General of India 2011). The ST female literacy rate stands lowest at 47.1 as compared to 65.46 for the national female literacy rate (Figure 3). Similarly, among younger female cohorts (ages 15–21 in 2005), ST women attain an average of just four years of education,

FIGURE 3. LITERACY RATE

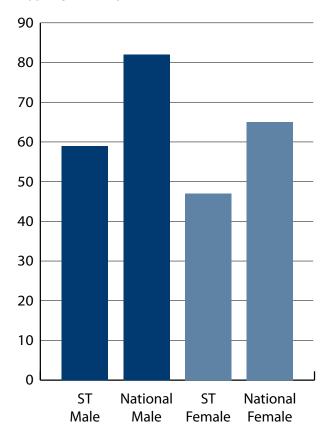
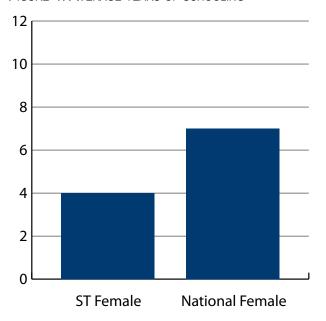


FIGURE 4. AVERAGE YEARS OF SCHOOLING



three years less than non-tribal women (Figure 4). Thus, marginalized tribal children are at a learning disadvantage and girls within this group are even more excluded and disadvantaged. Although the dropout rates of tribal girls have decreased over the years (from 75 percent to 61 percent in grades 1 to 10; 35 percent in 2010 to 31 percent in 2014 in grades 1 to 5; and from 59 percent in 2010 to 46 percent in 2014 in grades 6 to 8, according to MHRD Government of India statistics), dropout rates for tribal girls still remains high, further illustrating ST girls' marginalization.

GENDER GAPS IN MLE POLICY

The current MLE policy, as implemented in the Pade Bharat Bade Bharat⁵ (PBBB) and Odisha MLE programs, takes a gender-blind approach to multilingualism and its challenges. While it focuses heavily on decentralized budgets, expenditure, assessments, teacher trainings, and working with school management committees, it does not address the specific learning challenges faced by

tribal girls. Research elsewhere (Leach 2000, Dieltiens et al. 2009) tells us that decentralization of educational financing and control, the introduction of cost-sharing mechanisms and community involvement in the running of schools, and the privatization and deregulation of training are undermining the most urgent task of increasing girls' participation in education and learning.

Promoting the transition to the dominant language without losing linguistic identity is especially important for tribal girls and their families. Not only can maintaining linguistic identity while acquiring skills in the dominant language help empower tribal girls themselves, but the empowering effects can also be felt across generations. The tribal girls play a significant role in transferring their cultural and linguistic identity to the next generation of children (Rani et al. 2011). They are the ones who support their children in acquiring language skills, both in the mother tongue and in the dominant language. This capability increases their children's prospects of mobility in larger society through better economic prospects, productivity, and entitlement.

However, observations from the case of Odisha illustrate that tribal girls are unlikely to fulfill their cultural roles in the transfer of linguistic identity to the next generation for two main reasons: First, they don't get the opportunity to use their mother tongue at the pre-primary and primary levels to build language skills in the dominant language. This is because the language transition between the pre-primary and primary levels is broken, resulting in a rough transition from the mother tongue at the pre-primary level to the dominant language at the primary level. The second reason is that the early exit from the mother tongue in the primary grades cuts short students' ability to build

language skills in their first language (Mohanty 2009, Jhingaran 2009).

Though addressing MLE is particularly important for tribal girls, current education policies have adopted a narrow and simplistic approach to address gender inequities and have proved ineffective to date. Global research shows that this happens largely because the policies are not embedded in any clear understanding of the gendered nature of society and the role that schooling plays in perpetuating unequal gender relations (Leach 2000). We thus find that such policies often fail to help tribal girls succeed.

The characteristics of gender-blind MLE policies are that they do not address the unique educational challenges faced by girls, including the grave problem of low retention and attendance of tribal girls in schools. Tribal girls tend to drop out from or miss a lot of school due to the added pressures of household work, the necessity for sibling care, or most poignantly, demotivation (Ghosh 2007, Dashora 1995). These circumstances often contribute to their inability to gain language skills in the dominant language, which then leads to low self-esteem and their increased likelihood to not complete a full cycle of education (Agnihotri 2010). Gender-blind MLE policies ignore the obstacles borne by tribal girls and the importance of supporting their smooth transition from mother tongue to multiple languages and sustaining their motivation through their proficiency in understanding subjects being taught through these languages.

A final obstacle lies in policy implementation. Presently the policy leaves a choice to the state in terms of whether or not to continue use of tribal languages at the post-primary level (Jhingaran

2009), meaning that many students lose access to MLE once they leave primary school. This situation is extremely problematic as the evidence suggests that the sudden elimination of MLE processes at higher levels of education impacts students negatively because they do not yet have sufficient skills in the dominant language to learn at higher levels.

GIRLS MAY BE READING, BUT THEY ARE NOT COMPREHENDING WHAT THEY READ

A lack of MLE can particularly contribute to low reading and comprehension skills. Many studies have shown that students in India are reading but not comprehending what they have read, but ST students are doing worse, and ST girls are doing even worse than that.

ASER 2014 survey gives a grim picture of reading skills of students in India, reporting that 50 percent of rural children enrolled in grade 5 cannot read grade 2 texts. Although the percentage of children able to read grade 2 texts increases with grade level, (grade 3: 24 percent; grade 5: 48 percent; and grade 8: 75 percent), the ability of students to read with comprehension is a major issue. ST children are doing worse than the national average, showing significantly lower scores and having the poorest results in both language and mathematics among all social groups according to the National Assessment Data (NCERT 2014).6 In Odisha, language and mathematics performance of ST students is also significantly below the national average: The percentage of students, both girls and boys, who are able to listen, recognize words, and read with comprehension is lower than the national average. Even though 100 percent of grade 1

children are able to identify pictures, only 23 percent of children are able to describe pictures in their own words in spite of the pictures being drawn from their immediate context (Karak 2015).

Reading without comprehension by girls in ST areas is caused by a number of factors, including MLE-related challenges, such as:

- Misdirected reading time: Teachers spend too much time on domains like letter and word identification and on introducing children to written symbols, but not enough time on providing all around language experiences, building vocabulary in different contexts (Panda and Nag 2015).
- 2. Inconsistent attendance: Girls score lower on competencies requiring regular practice because they tend to have inconsistent attendance. On the competencies requiring regular practice (punctuation, independent writing, alphabets, and word recognition), boys fare slightly better than girls. They are able to read in greater proportion than girls and are better at punctuation. More than 80 percent of independent readers are the ones who regularly attend school (Karak 2015). The poor scores in punctuation, word recognition, and independent writing of students who miss school compared to their scores in listening comprehension and grammar further suggests that time away from the classroom prevents students from practicing certain reading skills (Karak 2015, Panda and Nag 2015).

There are, however, other reading competencies—such as vocabulary development, expressive and receptive language, and

recognizing print material available in the daily environment (newspapers, packages, etc.)—that can be gained without regular school attendance through interactions with family members at home or through participation in cultural activities. Thus, tribal girls, even though they are at a disadvantage in terms of gaining reading competencies through schooling, are not facing a total loss because there are some valuable learning opportunities in tribal homes such as storytelling and celebrating festivals.

3. A focus on behavioral change: The school system is largely geared towards supporting behavioristic change in girls in terms of building their fluency in reading in multiple languages. However, research shows that after four years, students' reading fluency may be higher but their creativity, comprehension, and understanding of the external world is much lower (Sachdeva 2015). This shows that rote learning may support fluency but is unable to build comprehension and application skills in girls.

The behavioristic approach is normally followed by non-local teachers using traditional methodologies as they may not be competent in tribal languages and MLE strategies. The case of Odisha reflects that there are challenges in recruiting local female tribal teachers as well as in retaining them due to lack of motivation and incentivization. Thus, the system rests on non-local teachers who continue to follow routine and generic practices, which are unable to build necessary multilingual skills for both boys and girls (Panda and Mohanty 2009, Bedamatta 2014).

4. Insensitive pedagogy: Given the multilingual context in ST classrooms, the processes and pedagogies are not conducive to reading, learning, and comprehension, with most teachers not adequately engaging in "reading specific" activities (Panda and Nag 2015, Karak 2015). However, wherever the text lessons are from the children's cultural context and the language medium of instruction is the children's home language, reading skills are better developed. These skills are even better if the students have undergone at least three years of preschool education (Panda and Nag 2015).

Teachers do not interact with students in their mother tongue—these interactions are as low as 7 percent in Odisha—largely using the less-understood Odia, although at times a few teachers do switch to the student's mother tongue to explain some concepts and make instructions clearer (Karak 2015). Teachers generally do not use teaching and learning materials other than the blackboard, textbooks, or library books, nor do they create or use print-rich materials. Although research shows that what works well with a whole language teaching method is freedom for the child to explore and learn herself (Panda 2015), most of the early reading activities employed in tribal schools are teacher directed and teacher controlled.

In addition, pedagogies employed by teachers in tribal schools are often insensitive. Many times students in ST areas are identified and branded as non-readers, depleting their motivation and creating withdrawal from active participation in the classroom. Thus, children often experience more anxiety and fear due to not having sensitive and conducive environment and understanding around their low performance.

Another major problem is that teachers generally are resigned to the belief that parents will withdraw girls once they approach marriageable age anyway, and thus teachers are less motivated to work with tribal girls (Sachdeva 2015).

Finally, those involved in providing academic support to teachers towards employing positive pedagogies and processes are themselves insensitive to gender and tribal issues. Cluster Resource Centers (CRC)7 are extremely critical as direct linkages to the grassroots due to their responsibility to provide administrative and academic support to teachers and onsite monitoring. While most Cluster Resource Center coordinators receive training and are aware of their responsibilities, their skills in providing academic support to teachers in the domain of language acquisition and gender sensitivity are weak (Karak 2015, Sachdeva 2015).

SOLUTIONS FOR GIRLS' READING

The solutions recommended below suggest a way ahead to address social, pedagogical, and systemic barriers that impede tribal girls from acquiring reading skills. More detailed and specific solutions on each of the three domains follow this summation.

Social

Community linkages

- What communities "want" for their girls must be integrated in the MLE strategy.
- Policy should contextualize MLE as a curriculum to build bridges among languages, respecting diversity and not promoting languages as rich-poor, high-low, powerful-powerless, resourceful-resourceless, or gender specific.

Pedagogical

Pedagogy

• Classroom time is the primary learning time for tribal students. For this reason, time spent in the classroom must be optimally organized through a meaningful pedagogic intervention, using heterogeneity, multilingual, and multiculturality as resources (Agnihotri 2010), thus building on the real environment, existing knowledge, exposure, and needs of tribal girls. In addition, as part of a revised MLE pedagogy, policy directives must include a "spiral" curriculum that recapitulates concepts for girls—since they are more likely to miss out on classroom time—and accommodates learning style differences between boys and girls.

Teacher development

Adequate resources to implement a complex MLE program, including a strong gender component at all levels, and institutionalizing a rigorous and sensitive teacher development program must be realistically and carefully allocated.

Assessment and indicators

 State-level survey findings must be reflected upon and used for improving the quality of teaching and learning, with clear linkages made between the external and the continuous comprehensive evaluation.

Systemic

Approach in continuum

• The gender-sensitive approach must be addressed as a continuum across pre-primary, primary, and up through higher schooling, with the relevant ministries and departments working together to develop and implement a progressive and comprehensive curriculum and operationalizing strong information flow system, working-together forums, and joint responsibility framework.

Solution 1: Address impeding social issues

ST girls' performance in language acquisition is not a reflection of lack of motivation or lack of value of girls' education, but rather of the issues related to the marginalization and lack of social capital of these communities. In order for MLE policies to be effective, policymakers must engage in critical dialogue with the community to understand and address these social barriers impeding tribal girls' language acquisition.

Based on evidence that communities are aware of what kind of education they consider important for their girls and aspire for their girls (Sachdeva 2015, Panda and Nag 2015), MLE strategies must determine what the communities "want,"

especially for their girls. It is essential to work with communities to support the regular attendance of girls, to promote a reading culture at home, and to share the progress of their daughters. Evidence shows us that if parents are convinced about value of education, they support their girls to enroll, attend, and continue education (Sachdeva 2015). It is also important to work with communities to track a trajectory for the destination for their daughters at the completion of their education, as it is not known if they would continue the focus and interest on girls education or would pull their daughters out due to poor performance or needs at home (Sachdeva 2015).

The current status quo in terms of aspiring to acquire only the dominant language while losing one's own mother tongue is often disempowering and can reduce girls' confidence and pride in their tribal background (Mohanty et al. 2009).

Thus, MLE education for empowerment should not be promoted as a move towards acquiring only the dominant powerful language, but should be about respecting one's own language and using it to acquire skills in the dominant language. Empowerment through education is important for marginalized ST communities in general and for their girls specifically, and must be a topic of discussion between education functionaries (planners and implementers) and the communities. Critical dialogue with the tribal communities on the twin issues of 1) preserving local languages and 2) acquiring the mainstream language helps carve out a path for equality through the next generation of educated tribal girls and women. These women will be empowered to have a voice and negotiate for their own rights and that of their communities.

The discussions between the communities and education functionaries should also entail how multiple language acquisition is a tool for empowerment, not only for tribal girls but also tribal boys. This will enable them to make informed choices about their lives and develop an understanding on how the world looks at them and their own well-being.

Solution 2: Focus on comprehension in pedagogy

A responsive policy must maintain a strong focus on the use of multilingual resources and the multilingual pedagogy to help children acquire language skills. Teaching reading in multilingual contexts first requires that teachers' attitudes toward tribal children and tribal girls especially are positive and have realistic expectations. Second, teachers must be adequately trained and prepared to engage in a range of teaching methods that are employed in a mutually reinforcing manner, which motivates students to have a better and longer attention span in reading activities and are particularly relevant for girls who show poor attendance (Panda and Nag 2015, Agnihotri 2008).

The process for building reading skills with comprehension must rest on the principles of integrating gender and cultural sensitivity in the approach that focuses on improving fluency, broadening vocabulary, and understanding of content. This intervention must be supported with *relevant and varied instructional materials* in MLE, contextualized for the cultural and gender context. A bank of approaches and techniques covering a wide range of genres, themes, and cultural context must be used to build and enhance language skills. However, the key is not to use "one approach and same approach," but adopt a more

flexible teaching methodology and activities to retain attention and interest of students.

Solution 3: Construct reading experiences as per gender differences

The MLE assessment system must account for different paces of learning, especially given the evidence illustrating that boys and girls learn and excel in different competencies around reading.

The idea is to help translate these differences into a sustained and rigorous pedagogic intervention that can support tribal girls and boys in achieving milestones in the domain of language acquisition. Gurian and Kathy (2010) support the existence of discrete differences between boys and girls in their brain development, identifying neurological differences that contribute to girls being more docile, more stress prone, less competitive, less self-reliant, proficient in absorbing more sensory data but less abstract data, less logical, and more fragile as they take things more personally. The neurological bases of these differences are further accentuated by conservative socialization practices, where community expectations of girls can lead them to become more subdued and accommodating in comparison to boys.

Research also identifies positive aspects of neurological differences between sexes as girls tend to be inherently capable of speaking sentences earlier than boys, better in verbal communication and attention span, less aggressive, better able to store greater quantity of random information (emotional and relational), capable of absorbing more sensory data (smell, touch, hear), and less impulsive (Gurian and Kathy 2010).

There is a combined effect of neurological differences and different socialization practices on girls,

and thus there is a need to tap into positive learning pedagogies that play to learning differences between girls and boys. The understanding that the girls have a potential to apply their biological strengths and enabling socialization processes to their advantage must be built in the teacher training and support organized for them. These involve directing pedagogy to employ use of bonding and attachment with girls, increased empathy, and verbalization of concepts, different disciplining techniques, more use of group and peer learning, and use of mentors for their motivation.

Solution 4: Prioritize assessment and indicators for girls

In addition to the routine education indicators such as enrollment, completion, and achievement, specific critical indicators need to be tracked to inform the policymakers and implementers to understand the status of MLE in the country and, within that, of tribal girls. These indicators must be appropriately used in the entire planning and resourcing around MLE, moving away from an input-oriented approach to a learning targets approach, especially focusing on tribal girls:

- 1. Attendance as an indicator to influence success of girls in reading.
- Gender-specific indicators for sub-competencies in mother tongue as well as state language.
- Process-level indicators, such as socio-gender sensitivity of teachers, attendance of teachers, classroom processes (teaching methods, planning and application of curricula, materials used), teacher support (quality and duration of MLE

teacher training and on-site support), and accountability mechanisms for teachers and system functionaries, among others.

4. A broader set of outcome indicators beyond literacy and numeracy (e.g., creativity, confidence, understanding of global affairs, voice, negotiation) to ensure all girls and boys are learning the skills needed for life and livelihood.

Solution 5: Strengthen platforms for MLE for tribal girls

Strong MLE practices will develop students' home language competence and, at the deeper level, develop strong multilingual competence, identity, and vital collective processes (like community based collectives) that will sustain the linguistic and the eco-cultural diversity of the society.

That being so, the MLE intervention must involve a curriculum that adopts an *integrated approach* supporting acquiring multiple languages and life skills, especially targeted towards the needs of the ST girls. This has important implications for those who conceptualize, manage, and deliver MLE education.

As the policy builds on strengthening the domains of early grades to build language skills and local language proficiency, appointing tribal teachers, and training teachers, the CRCs can be a conduit of much of the training needed to implement these solutions at the grassroots. Thus the MLE policy must explicitly mention a particular focus on the capacities and infrastructure of the CRCs to strengthen their academic support to teachers as the actual implementers of the MLE strategy. They have to go through the same rigor that is planned for the teachers, building positive atti-

tudes, language skills, and proficiency in local languages, and sub-competencies in reading and assessment.8

Solution 6: Accommodate tribal girls in MLE policy

MLE policy in Odisha and India as a whole must be specifically contextualized for tribal girls and rooted in the cultural and ethnicity context of the communities, if the reading goals for tribal girls are to be met. Specifically, policies must continue to focus on the mother tongue across the entire level of education until high school, contextualize gender-specific strategies in classroom processes, give directives to maintain a manageable teacher-pupil ratio in MLE classrooms, set up a robust teacher development process to build the MLE skills of teachers, and target attitudinal change toward ST girls. These solutions are further elaborated below:

- To remove the linguistic blocks for girls to move from initial to higher levels of education, clear linkages between pre-primary, primary, upper primary, and secondary levels must be created in order to smooth the transition to and promote the retention of tribal girls in higher levels of schooling.
- An important aspect in supporting tribal girls in school and enabling them to strengthen their reading skills is the contextualized teaching strategies for their needs. This strategy—being quite complex—rests predominantly on passionate local tribal teachers having positive attitudes towards girls. Local tribal female teachers can play an extremely constructive role in this direction (Panda and Nag 2015).
- The policy must account for clear norms on

female teachers and on an adequate teacher-pupil ratio maintained in the multilingual classrooms. In fact, very little data is collected on the number of local tribal female teachers teaching in government schools in different languages and therefore little is known about the nature of the problems faced by system in recruiting, appropriately deploying, and retaining these teachers.

- Teacher development and encouragement towards building sensitivity and positive attitudes towards tribal girls is the next logical component for strengthening the policy. The utmost need for positive teacher attitudes towards tribal girls and their expectations from the girls in particular have emerged as significant factors in retaining the girls in school (Sachdeva 2015, Panda and Nag 2015, Karak 2015).
- No matter what changes are implemented at the policy level, negative attitudes

of the teachers towards the tribal students and specifically girls will undermine any attempt to retain them in school. Teachers are also more prone to not using gender-sensitive or caste-sensitive language in classrooms, assuming that tribal girls and boys do not need to be addressed differently. Solution 3 offers suggestions as to how they need to be addressed differently. This and other similar examples merit critical consideration of teacher training within the MLE context and the importance of addressing sensitivity training for teachers and the CRC coordinators responsible for providing academic support to teachers in both the MLE policy and in addressing girls. Space must be provided to accommodate their needs for training on language through nontraditional and innovative methodology and ways to elicit cooperation from teachers and other officials.

APPENDIX

Three-language formula

The three-language formula, proposed in 1957, later modified by the Kothari commission in 1966, and classified as a policy in 1968, recommended the use of the mother tongue as the first language, Hindi and/or English as the second language, and a modern Indian language as the third language. The formula intentionally held English as the dominant language for all states to pursue, leaving the states to follow their own formula for identification of the modern Indian language. Consequently, English was established as the supreme and powerful language for all.

Borrowing from Mohanty's (2008) reflection, historically, education actively perpetuated social and linguistic inequalities to accommodate the dynamics of power relationships between languages and the social groups who speak these languages. Persian, Sanskrit, and English exerted significant, stable, long-term, and enduring impact on the languages of the masses and played a dominant role in education. These derived power and dominance from the patronage of the Moghul, Hindu, and British rulers. The languages of the majority or masses were influenced by these dominant languages through several processes of linguistic convergence, borrowing, and change. The language of the marginalized, indigenous, or folk varieties or dialects of the disadvantaged groups had little or no presence in education and scholarship—and hence most of them did not develop a writing system or orthography.

The Kothari commission accommodated the mother tongues in the three-language formula in order to address the need for linguistic-based

group identity, but instructed the multilingual interventions to be implemented only if there was a minimum of 10 minority students in a class and a total of at least 40 in a school.

After becoming a policy in 1968, the three-language formula continued to address the needs of linguistically diverse communities, but did not spell out specific provisions for addressing linguistic diversity in education.

Multilingual education (MLE) pilot Odisha

Instructions by the government of India to introduce the mother tongue as the first language of instruction in tribal dominated states encouraged the state of Odisha, in 2006, to initiate an MLE based program in 10 tribal languages in grade 1 of 195 primary schools. Subsequently, grades 2, 3, 4, and 5 were added each year, taking the number to 544 schools (3.8 percent of the total primary schools in the state), 384 MLE teachers and 428 language instructors, and 33,555 students. Pilot schools had at least 90 percent ST children enrolled (MLE policy and implementation guidelines 2013).

The intervention uses mother tongue as the medium of instruction (MOI) to strengthen the language skills of students and to transition them slowly to the dominant or mainstream language (Odia or English) by the end of primary schooling. The tribal mother tongues are written in the script of the state language, modifying it for phonological features if necessary. The mother tongue is used in decreasing proportion across the primary years, while the mainstream language is introduced in class 2 with increasing use with each successive grade until it is the sole medium of instruction by grade 6. The

MLE approach follows national and state curricula for grade-specific competencies in various subjects. Reading and writing skills in English constitute a significant part of the grade 4 curriculum.

This MLE approach focuses on selecting the language of instruction based on the enrollment of students coming from various tribes. The tribal mother tongues are written in the script of the state language and incorporated into the school curriculum, teaching and learning materials, with all materials developed and vetted by groups including teachers, community leaders, writers, and artists from the target learning community. The sequencing of the text materials, stories, and other teaching and learning activities are decided by village calendar approach noting seasonal and periodic community activities (Mohanty et al. 2009). The strategy incorporates textbooks' references to

indigenous knowledge systems, culture, festivals, games, songs, and stories from the tribal communities. Teachers are trained in specific pedagogies and on the MLE approach, as well as in the monitoring and evaluation of the entire process.

The MLE approach largely recruits teachers from the tribal communities themselves. It draws extensively from community involvement principles. Children are encouraged to participate in the classroom and in different activities. This approach must be evaluated more in depth to draw out evidence-based lessons.

However, in most schools the MLE approach is primarily addressing a bilingual situation and not a multilingual context in the real sense and thus the strategy for a real multilingual approach cannot be rested on this experience alone.

BIBLIOGRAPHY

- Agnihotri, R. 2008. "Multilinguality for India." *Seminar*, 590. Retrieved from http://www.india-seminar.com/2008/590/590_rama_kant_agnihotri.htm.
- ASER. 2014. Annual Status of Education Report 2014. New Delhi: ASER Center.
- Bandyopadhyay, M. and Subrahmanian, R. 2008. "Gender Equity in Education: A Review of Trends and Factors." Create Pathways to Access Research Monograph, 18. Brighton, UK: Consortium for Research on Educational Access, Transitions, and Equity. Retrieved from http://www.create-rpc.org/pdf_documents/PTA18.pdf.
- Beaty, J. J. and Pratt, L. 2007. *Early Literacy in Preschool and Kindergarten: A Multicultural Perspective*. Upper Saddle River, N.J.: Pearson Merrill/Prentice Hall.
- Bedamatta, U. 2014. "The MLE Teacher: An Agent of Change or a Cog in the Wheel?" *The Australian Journal of Indigenous Education*, 43(2): 195–207..
- Dieltiens, V., Unterhalter, E., Letsatsi, S., and North, A. 2009. "Gender Blind, Gender-Lite: A Critique of Gender Equity Approaches in the South African Department of Education." *Perspectives in Education*, 27(4): 365–374.
- Fiona, L. 2000. "Gender Implications of Development Agency Policies on Education and Training." *International Journal of Educational Development*, 20(4): 333–347.
- Geetha, N. 2013. "Issues Related to Medium of Instruction and Schooling of Tribal Children." *Political Weekly*, 29(42): 2747–2749.
- Ghosh, J. and Pal P. 2007. "Inequality in India: A Survey of Recent Trends." DESA Working Paper No. 45. New York: United Nations Department of Economic and Social Affairs.
- Government of Odisha. 2013. *MLE policy and implementation guidelines*. Odisha: Department of Elementary Education.
- Government of Odisha. 2013. *Notification on MLE Issued by OPEPA, Odisha* Department of School & Mass Education.
- Gurian, M. and Stevens, K. 2010. "With Boys and Girls in Mind." *Educational Leadership*, 62(3): 21–26.

- Haan A. and Dubey A. 2003. "Extreme Deprivation in Remote Areas in India: Social Exclusion as Explanatory Concept." Paper presented at the Manchester Conference on Chronic Poverty, April 2003.
- Jhingran, D. 2009. "Hundreds of Home Languages in the Country and Many in Most Classrooms: Coping with Diversity in Primary Education in India." In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, and M. Panda (Eds.), Social Justice Through Multilingual Education. Bristol: Multilingual Matters.
- Karak. 2015. Baseline Study on Early Grade Reading in Uttar Pradesh and Odisha. New Delhi: CARE India.
- Lewis, M. and Lockheed, M. 2008. "Social Exclusion and the Gender Gap in Education." World Bank Policy Research Working Paper Series, 4564. Washington DC: World Bank.
- Ministry of Human Resource Development. 2014. Educational Statistics at a Glance. New Delhi: Government of India Ministry Of Human Resource Development Bureau of Planning, Monitoring and Statistics.
- Mohanty, A. K. 2008. "Multilingual Education in India." In J. Cummins and N. H. Hornberger (Eds.), *Encyclopedia of Language and Education, 2nd ed.* (pp. 165–174). New York: Springer. http://doi.org/10.1007/978-0-387-30424-3 123.
- Mohanty R. P. and Biswal D. N. 2009. *Elementary Education in Tribal India-Education vs. Welfare Department Schools*. New Delhi: Mittal Publications.
- Mohanty, A., Mishra, M. K., Reddy, N. U., and Ramesh, G. 2009. "Overcoming the Language Barrier for Tribal Children: Multilingual Education in Andhra Pradesh and Orissa, India." In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, and M. Panda (Eds.), Social Justice Through Multilingual Education (pp. 283-297). Bristol: Multlingual Matters.
- Mohindra, K., Narayana, D., Harikrishnadas, C., Anushreedha, S., and Haddad, S. 2010. "Paniya Voices: A Participatory Poverty and Health Assessment among a Marginalized South Indian Tribal Population." *BMC Public Health*, *10*: 149. http://doi.org/10.1186/1471-2458-10-149.
- National Council of Educational Research and Training (NCERT). 2014. *National Achievement Survey*. New Delhi: NCERT.

- Panda M. and Mohanty A. K. 2009. "Overcoming the language barrier for tribal children: Multilingual education in Andhra Pradesh and Orissa, India." In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, and M. Panda (Eds.), Social Justice Through Multilingual Education (pp. 320–344). Bristol: Multilingual Matters.
- Panda, M. and Nag. R. 2015. A Study of Reading Pedagogy in Early Grades in Odisha and Uttar Pradesh. New Delhi: Care India.
- Ramachandran, V. 2004. Fostering Opportunities to Learn at an Accelerated Pace: Why Do Girls Benefit Enormously? New Delhi: UNICEF New Delhi.
- Rani, Rajani and Neerja, P. 2011. An Analysis of Tribal Women's Education in India. *International Conference on Social Science and Humanity IP-EDR Vol.5.* Singapore: IACSIT Press.
- Registrar General of India. 2011. Census of India 2011. New Delhi: Government of India.
- Sachdeva, S. 2013. *Building Perspectives for the Marginallised*. New Delhi: CARE India.

- Sachdeva, S. 2015. Analysis of social, pedagogical and systemic barriers for early grade reading for tribal girls. New Delhi: CARE India
- Skutnabb-Kangas, T. 2000. Linguitic Genocide in Education or Worldwide Diversity and Human Rights. New Jersey: Lawrence Erlbaum Associates, Inc.
- Sperling, G., Winthrop, R., and Kwauk, C. 2016. What Works in Girls' Education: Evidence for the World's Best Investment. Washington DC: Brookings Institution Press.
- Subramanian, S. V., Smith, G. D., and Subramanyam, M. 2006. "Indigenous Health and Socioeconomic Status in India." *PLoS Medicine*, 3(10): 1794–1804. http://doi.org/10.1371/journal.pmed.0030421.
- UNESCO. 2009. "Atlas of World's Languages in Danger." Paris: UNESCO http://unesdoc.unesco.org/images/0019/001924/192416e.pdf.
- USAID. 2012. *USAID Education Strategy Technical Notes*. Washington DC: USAID.

ENDNOTES

- 1. India's Scheduled Tribes (ST), or adivasis, are a historically excluded community, marginalized by its geographic isolation and the social, religious, linguistic, and cultural distinctiveness (Subramanium 2006, Nayar 2007, Paniya 2010, Sachdeva 2010). Their powerlessness as a community is compounded by systematic barriers that prevent them from availing of the rights, opportunities, and resources (e.g., housing, employment, health care, education, civic engagement, and democratic participation in social processes) that are usually available to all members of society. Constituting about 8 percent of the total Indian population (Census of India 2011), there are 645 tribes (many overlapping types in more than one state) in different States and Union Territories. Madhya Pradesh, Maharastra, Orissa, Gujrat, Rajsthan, Jharkhand, Chhatishgarh, Andhra Pradesh, West Bengal, and Karnataka are the states having a large number of scheduled tribes, accounting for 83.2 percent of the total scheduled tribe population of the country. Assam, Meghalaya, Nagaland, Jammu and Kashmir, Tripura, Mizoram, Bihar, Manipur, Arunachal Pradesh, and Tamil Nadu account for another 15.3 percent of the total scheduled tribe population.
- 2. The Odisha case study rests on three primary research studies conducted in one of the state's tribal-dominated districts, Mayurbhanj: 1) A baseline survey (Karak for CARE India 2015) administered under the USAID supported Early Start: Read in Time project that assessed reading competencies of students in grades 1 to 4 in select locations of Uttar Pradesh and Odisha (district Mayurbhanj) in India. 2) Data from 14 schools in three tribal districts inclusive of Mayurbhanj and policy analysis (Sachdeva 2015). 3) Findings on early grade reading pedagogy in Odisha and Uttar Pradesh based on the research conducted by Panda andand Nag (2015) for CARE India.
- A multilingual policy is a language policy that uses specific educational strategies (curricular design, classroom instruction practices, pedagogy, and teacher professional development) in classrooms with students from varied linguistic backgrounds.
- 4. As part of the Multilingual Education (MLE) pilot, in 2006, Odisha's State Tribal Advisory Committee adopted 10 languages (out of 72 mother tongues grouped into 38 languages, with tribal languages varying from 22 to 26) to be used as medium of instruction in primary schools having a majority of tribal students across 12 districts (UNESCO 2009). After the addition of nine more languages in 2014, three to seven are still left out. The implementation of this program was primarily in monolingual situations where the majority of students speak the same tribal language.

- 5. Pade Bharat Bade Bharat (PBBB) is a nation-wide sub-program of Sarva Shiksha Abhiyan (Program for Universal Education), designed to improve comprehensive early reading, writing, and early mathematics for children in grades 1 and 2. The program aims to provide a print-rich environment, timely distribution of books, new teacher mentoring, and an appraisal system to participating schools.
- 6. The National Achievement Survey (NAS) provides information on the overall status of reading of a sample of students studying in grades 1, 2, and 3 in 34 states. In these states, students were able to answer only 64 percent of language items correctly and 66 percent of mathematics questions correctly. Only 27 percent of students in grade 1, 52 percent in grade 2, and 75 percent in grade 3 were able to read a passage presented to them. Across the primary grades, ST students' competencies in phonemic and phonic awareness, comprehension, reading fluency, and independent writing are poor, but are poorest in grades 1 and 2. Students tend to perform better with simpler questions and then fail to address higher order questions. A similar trend continues for writing at grades 2 and 3, with less than 25 percent children able to write (Karak 2015). At least 50 percent students in the classrooms cannot read age-appropriate texts in grades 2 to 4, and 40 percent in grade 5 (Panda and Nag 2015).
- The Cluster Resource Centers (CRCs) form the lowest rung of a vertical hierarchy of institutions responsible for providing regular academic support to school teachers and for supporting a process of school quality improvement.
- 8. Challenges in MLE recognized by all institutions are teacher specific (e.g., low remuneration, poor teacher attitudes, inadequate teaching and learning material in schools, and a lack of activity-based and structured lesson plans in classrooms) and system specific (e.g., training transmission loss, weak research and development, weak monitoring and evaluation, and inconsistent follow up of MLE interventions) (Sachdeva 2015).

The Center for Universal Education at the Brookings Institution

The Center for Universal Education (CUE) at Brookings is one of the leading policy centers focused on universal quality education in the developing world. CUE develops and disseminates effective solutions to achieve equitable learning, and plays a critical role in influencing the development of new global education policies and in transforming them into actionable strategies for governments, civil society and private enterprise.

For more about the Center for Universal Education at Brookings, please visit: www.brookings.edu/universal-education

Cover photo courtesy of CARE India

BROOKINGS

1775 Massachusetts Avenue, NW Washington, DC 20036 202-797-6000 www.brookings.edu/universal-education