Design Thinking for Multilingual Education: The Question of Medium in NEP 2020

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Abstract

This article aims to study the monolingual ideologies that permeate the education system to understand their implications for the process of teaching and learning in Indian classrooms. Multilingualism is a key component of India's vast linguistic heritage and a part of its nation building philosophy. All educational policies have emphasised the need for multilingual education with mother tongue as an intrinsic component and the NEP, 2020, reaffirms that without a plan of action. The ground realities present diversity of situations with diverse forms of MLE where many smaller mother tongues are endangered and suffer from lack of institutional support. English and regional languages are cast as adversaries in private vs government schools and the question of medium adds to the divide. The present article uses the concept of design thinking to address multiple dimensions of MLE and proposes that two or more languages be used as medium from the earliest stage where mother tongue is coupled with the state official language. It also emphasises that all languages be treated as medium of communication and pedagogy evolved to test all skills including oral and written. In different phases different languages may be used together so that single language medium schools rework and redesign their materials, method, and approach to become overtly multilingual across the curriculum. Multilingualism is to be treated as a resource, as a strategy and as a goal. This calls for collective action involving all stake holders and willingness to address emerging problems using design thinking to create a healthier ecology of multilingualism with strong roots in mother tongue and enhanced communicative competence.

> *"We can't solve problems by using the same kind of thinking we used when we created them."*
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> Albert Einstein

India is a multilingual country where *linguistic diversity* is an intrinsic part of its ancient multi-layered cultural heritage and an integral feature of its nation building philosophy. This Multilingualism is nobody's creation but an achievement of our culture and civilisation. Over centuries of contact genetically diverse languages have converged and diverged and developed shared traits that have made India a single linguistic area - a reflection of an underlying ethos that is accommodative and creative. The development of diverse scripts from a common source, Brahmi, has added to that oneness of spirit, willing to diversify and assume new forms to affirm new identities. Even foreign speech forms and other scripts have found their way in to further enrich our cultures and cognitive resources.

Maintenance of one's own mother tongue was seen to be the norm in India even as many became multilingual. But now, there is a growing concern that rapid social change may have affected some language use patterns resulting in language shift. Even though there is a constitutional directive 'to value and preserve the rich heritage of our composite culture', the task itself is often left to the communities themselves. No institutional arrangements are put in place to safeguard and strengthen the smaller languages as a result of which several have become marginalised and endangered. Educational programmes which must spearhead the movement are struggling to cope with pressures of the majority language, which is often the state official language, and the proponents of the official languages of the union—Hindi and English. English is gaining ground across regions and across social strata, propelled by the support of the elite who have manufactured a consent about its utilitarian economic value, whereas Hindi is struggling to keep pace as it is made out to be the language of lesser value, one that will strengthen our bonds as fellow countrymen and help in situations of interlingual contact but may not guarantee upward mobility. The fact that very few of the linguistic minorities are raising their voice for inclusion in education or are muted when they do so must also worry us. The need for a *counter elite* that takes up the cause of all languages was never stronger.

National Education Policy (NEP), 2020, recognises 'Multilingualism and the power of language' as a critical area for action at all levels-starting with foundational literacy and numeracy. It acknowledges the multilingual character of our dynamic society and seeks to promote multilingualism through inclusion of all mother tongues in schools to realise the vast linguistic potential in the individual learner and to further the nurturing capacity of the society for new *forms of multilingualism*. Multilingual education (MLE) could create a conducive *ecology for multilingualism*, where the growth of even one language spurs the growth of all others, making it the key to our quest for a harmonious social order rooted in diversity.

The challenges commence at the earliest level for NEP, 2020, stating "We are currently in a learning crisis: a large proportion of students currently in elementary school—over 5 crore—have not attained foundational literacy and numeracy" (Ministry of Education [MoE], 2020, p. 8). Those on ground will tell us these disparities have been around for a long and permeate all levels of education even as children get promoted to higher classes without attaining adequate levels of learning at lower levels.

The NEP has a wish list, both implicit and explicit, as far as language education in schools is concerned. It talks about initial education in mother tongue, linking gradually with other languages of power and opportunity including official languages of the state and of the union as first envisioned in the three-language formula (TLF). To dispel fears of language imposition—especially on the issue of Hindi as a compulsory language—flexible forms of TLF are suggested where states can have a major say in providing choice of other Indian Languages. Plus, classical languages that are a most valued part of our cultural heritage are to be interwoven at a suitable stage. In addition, foreign languages could be provided in later years of schooling to enable learners to participate in an interconnected global order.

To meet these challenges Multilingual education would involve constant innovation even as the question of medium acquires complex dimensions.

What is Design Thinking?

Tim Brown defines design thinking as:

> A non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative

> solutions to prototype and test. Involving five phases—Empathise, Define, Ideate, Prototype and Test—it is most useful to tackle problems that are ill-defined or unknown… It draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success. (IDEO, n.d.)

Design thinking as a term-first brought into usage by IDEO, is typically used in business environments to address a variety of problems through deep questioning and aimed to resolve the problems in design of products and services. It calls for a collective and collaborative approach where solutions are framed, tried out in practice, and through feedback they are reworked and redesigned. It has already made its way into the domain of education in some circles and could prove useful in designing more effective forms of multilingual education.

What we have done amounts to empathising with the cause of diverse language speakers, emphasising the Constitutional right to seek inclusion of their languages in education, underscoring the consequences of exclusion as many languages are endangered, and the need for an overtly multilingual pedagogy which addresses issues of access, equity and quality.

Addressing a Contradiction

NEP, 2020, at first affirms its commitment to early multilingualism and outlines a pedagogical approach to nurture it:

> As research clearly shows that children pick up languages extremely quickly between the ages of 2 and 8 and that multilingualism has great cognitive benefits to young students, children will be exposed to different languages early on (but with a particular emphasis on the mother tongue), starting from the Foundational Stage onwards. All languages will be taught in an enjoyable and interactive style, with plenty of interactive conversation, and with early reading and subsequently writing in the mother tongue in the early years, and with skills developed for reading and writing in other languages in Grade 3 and beyond. (MHRD, 2020, p. 13)

But it appears to undo this commitment by then stating that:

> Wherever possible, the medium of instruction until at least Grade 5, but preferably till Grade 8 and beyond, will be the home language/

mother tongue/local language/*regional language*. Thereafter, the
home/local language shall continue to be taught as a language
wherever possible. (MHRD, 2020, p. 13)

One wonders, after proposing early exposure to multiple languages, why
must the policy retract its position to state that Mother Tongue alone will
be the medium at the primary level? Plus, why must it abandon one
language as a medium to move towards the other?

NEP expects even private schools to promote the *same public policy*, which
may be the right thing to do, but refuses to dwell on the mushrooming
of English medium schools which teach English as first language and
often relegate the state official language to the margins and take no
cognizance of other mother tongues. Perhaps, the policy makers have
allowed for this subversion of multilingualism by prefacing and ending
their directive with "wherever possible". We know what happened in
Karnataka when the courts dismissed the state directive for compulsory
Kannada medium and allowed for English medium schools to cater to
the choice of parents by providing their children early access to English,
perceived as the language which modernises the outlook, enhances
economic opportunities, and provides access to higher echelons of a
socially stratified society. In the process, courts became party to the
perpetuation of a social divide without attending to social justice.

This problem of *state official language vs English medium* may never
have arisen if bilingual approach had been the official policy wherein
languages work as partners, not adversaries

Mother Tongue-Based Multilingual Education

It is axiomatic that the best medium for teaching a child is his MT.
Psychologically, it is the system of meaningful signs that in his mind
works automatically for expression and understanding. Sociologically,
it is a means of identification among the members of a community to
which he belongs. Educationally he learns more quickly through it than
through an unfamiliar medium.

It is no one's case that the MT is not the best medium of education. After
all, a child has adult-like competence in it even at the age of three or
four and one would expect educational planning to draw on that oral
ability and provide for firm rootedness in it from the first literacy act.
This would ensure easy grasp of the new form of language as written

and add a layer of metalinguistic awareness to the child's competence. MT can never be set aside or wished away for it is an integral part of the learner's cognitive apparatus which will have natural bearing on all other languages acquired in both formal and informal contexts. Schools that choose to exclude the MT do harm to the children and society as a whole by violating *linguistic rights.*

Diverse settings pose different challenges. In some cases, the mother tongues are *endangered* and the children are not as well versed in it as they are in the dominant/official language. The Tulu speaking child in Karnataka may know his Kannada even better and the Tagin speaking child in Arunachal may know Hindi more. In such cases, where the MT is the weaker component, the commitment to the MT must be affirmed in the foundational stage itself and the child given a good dose of it to strengthen the undernourished roots but without diluting the dominant language. The bilingual approach that the NEP underscores, which is the minimalistic model of MLE, is worthy of pursuit.

Many linguistic minorities are stable bilinguals, equally at home in the dominant language, their second MT. The official language proponents asserting regional identity may talk of cost cutting by avoiding mother tongue. Tamil Nadu illustrates this considerably where Saurashtri children and most minorities have never had any access to MT and are made to pay a price for being fluent bilinguals and taught only through Tamil. The benefits of multilingualism where the majority community too gains with participation of diverse groups is not understood

A case, however, may be made out that in multilingual settings even the MT-based bilingual approach may prove insufficient and that learners have also *the right to access official language* of both the state and centre. Of the many social groups that comprise a society, some may seek multilingualism from day one and call for flexibility in design to accommodate the demand for early access to English. Current theory suggests that multilinguals develop a common underlying proficiency in the languages they know and the order of introduction or the pedagogical method may not come in the way.

Some linguistic minorities may not insist on their language as medium and may be happy with minimal arrangements that introduce the children to the writing system of their languages. In some cases, graphisation or creation of a written form, often using one of the scripts being taught,

may be a quantum leap. Others may suggest inclusion of a variety as a spoken medium as is the case with many mother tongues included under Hindi, and still others may seek exclusion of some languages (Nagamese in Nagaland). Therefore, people's choice and state policy will be paramount in the design of the program.

Design features: Multilingualism as a Resource, as a Strategy and as a Goal

An educational programme designed for a group that recognises all languages used by its diverse members as resource materials and is willing to draw on that '*multilinguality*' in different proportions as a strategy to perform the task(s) of teaching diverse types of content, or even a new language-, ensuring that all that is taught is fully understood by one and all, and then further enabling all its members to express in different languages whatever they have learnt is *an ideal multilingual program*me whose goal is multilingualism across the curriculum.

The question of medium acquires complex dimensions for it involves use of language in the text, the language of instruction, the language of interaction between the teacher and the learner, the language with fellow faculty for teachers and with the peer group for students. It also involves the language used for testing and the language of responses. In short, it involves the total language use patterns, formal and informal, of the entire school community. In monolingual settings all interaction may be in the same language but in a multilingual setting they all may be rather different and mixed codes may also be in use. The question of choice surfaces for someone may want to switch from one medium to the other. Design thinking is the only way out to deal with complexity through collaboration which will enhance the collective competence and raise the performance of all.

Multilingual Education, if it has to succeed, must be seen as an endeavor that involves use of two or more languages as medium(s) of education and not one language as a medium and the other as a subject. In fact, the whole idea of language as a subject—as content more than form—is problematic for language is inextricably linked to our thought and cognition; it is intrinsic to meaning making and is acquired in communicative contexts; its very nature is of a medium whether it be first language or second. This has a major consequence

on the pedagogical approach to second language teaching in particular and calls for a change of linguistic environment in schools with some rethinking. It would emphasise that comprehension and production of both spoken and written forms of language must be integral to all language teaching and testing. What is being suggested is that both languages—say, Kannada and English, be used for all subjects at all levels and not be complementary, making way for dual medium. The child may choose to be tested in any of the two but on other occasions the teacher may stipulate the choice to make the learner strive.

The principle invoked in teaching the same content in more than one language is not only directed to promote social equality among diverse groups but also draws on the 'principle of expressiblity' used in speech act theory by John Searle which states that "whatever can be meant can be said" (1969, p. 19). In our educational context, it means all languages can be expanded or enriched or modernised to convey new content by creation of new forms of usage or through borrowing, if need be. It also means a language that is being used for *Basic Interpersonal Communication Skills* (BICS) can also be made ready for *Cognitive Academic Language Proficiency* (CALP) to use the distinction that Jim Cummins (1979) has brought to our thinking. The problem often is that children are expected to deal with the latter before the acquisition of the former as often happens in English medium schools.

It also follows that the very idea of single language medium schools, whether they be English medium or Kannada medium or Hindi medium, may be seen as a core part of the problem in a society that seeks to promote multilingual education. In legitimising one-language medium schools, we may have created a problem of structural sorts by perpetuating a social divide that privileges one language over the others-which may lead to stunted growth in other languages.

The question then shifts to: How are we going to engineer this paradigm shift or change of worldview? And our reply is that design thinking could help. There are two components of the exercise which are obvious: Making available materials in two or more languages and putting them to use. The sameness of content in two languages may contribute to some redundancy but our take is it will lead to reinforcement with added understanding and prepare our learners to deal with even monolinguals better. An English medium Kannada child would be able to talk about physics even to the Kannada medium child who knows little English.

All schools will have to do their thinking and show willingness to learn from others. Many English medium schools have overt and covert policies that dissuade children from speaking in languages other than English. Only in language classrooms are the children expected to talk in that language. Although the attempt is to promote English for BICS to support their CALP but languages in which they have already achieved good levels of BICS are not available for CALP. This lopsided arrangement must change. The task in regional language medium schools will be even more difficult as English is seen as a subject where only the textbook is to be understood and questions around it to be answered with no plans to develop BICS or CALP. English becomes a dreaded subject for them. Surely this too must change.

Design thinking is about collaboration and collective thinking. The goals of multilingual education should be made explicit and shared in the school which must become the minimum unit of societal change. Teachers of different subjects and of different languages must be involved in raising the level of performance. Parallel texts in different languages- at least two to start with-must be made available. Here technology with translation tools can do half the job as many languages are now available on mobile phone apps. Children can be taught to use such tools. Teachers will always be around to iron out difficulties but the willingness to try a new approach must be brought in.

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