Education for All Children[1]: Countering the Challenges through Teacher Education

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Abstract

The Education for All goals and the Millennium Development Goals have together underlined the primacy of educating children for the attainment of allied goals of human development. The achievement of all educational goals in general, and Universalization of Primary Education (UPE) in particular, depends largely on the preparedness and responsiveness of teachers to address various challenges. The present paper foregrounds the need for quantitative and qualitative capacity building vis-a`-vis teachers to pursue UPE. Further, it attempts to establish that whereas both the issues must be addressed to ensure that all children have an access to quality Education; they pose undeniable challenges to Teacher Preparation Programs. It suggests that whereas the issue of quality can be addressed by intensive teacher preparation interventions; equipping teachers to augment their pedagogical repertoire with Technology enabled education can be offered as an answer to the issue of Quantity. The present paper contextualizes the twin issues of quantity and quality to reflect the specific challenges faced by the UPE India chapter. The paper further aims to address the specific challenges that confront Teacher Education Programs in India as it pursues the aim of Universalization of Education for Children.

1. Introduction.

Education of All is a prerequisite for global development. This acknowledgement is iterated in the UNESCO initiatives on Education for all (EFA) and UN Millennium Development Goals (MDGs),as well. While Universalization of Education at all levels is the end aim; both EFA goals[2] and MDGs[3] have supported Primary Education as a prerequisite for achievement of other goals.

As the thematic paper on MDG 2 puts it; Primary education is a powerful driver for the realization of all the Millennium Development Goals (MDGs) and for sustainable development, more broadly [1]. Various UN policy documents have referred to Primary education as 'a basic human right, both transformative and empowering'. It is seen as a means for accessing broader social, economic, political and cultural benefits.

As a result, Universalization of Primary Education has been in global focus since 1990. The progress towards UPE has been encouraging; but not all challenges have been surmountable. Efforts to achieve UPE continue under the twin aegis of EFA and MDGs.

1.1 **EFA, MDGs and the Universalization of Primary Education.**

The Education for All (EFA) movement is a global commitment to provide quality basic education for all children, youth and adults. [2]

EFA movement was launched at the World Conference on Education for All (WCE) in Jomtien, Thailand (5-9 March 1990). The WCE was attended by delegates from 155 countries and representatives from over 150 governmental and non-governmental organizations. The participating delegates adopted a *World Declaration on Education for All*; which reaffirmed the notion of education as a fundamental human right. With regard to Primary education, it resolved,

"(*Goal 2.*) *Universal access to, and completion of, primary education (or whatever higher level of education is considered as "basic") by the year 2000."[3]*

However, the EFA targets were not achieved by the year 2000.
The international community then met again in Dakar, Senegal at the World Education Forum(WEF), and affirmed their commitment to achieving Education for All through six well defined educational goals[1] by the year 2015. Of these six goals, goal 2 focused on Universalization of Primary Education. It read as,

"*Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality*." [4]

The UNESCO World Education Forum, 2000 coincided in year and mission with the UN Millennium Summit held in New York at the turn of the century. The attending delegates adopted the Millennium Declaration [5] and set eight Millennium Development Goals (MDGs) pertaining to eight areas identified as most critical for human development [6]. Of the eight MDGs, MDG-2 specifically focused on education of children and lent support to the second EFA goal. MDG-2 spelt out as Target 2.a resolved to:

Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

The UN-MDG-2 and the second of the EFA goals are both geared at the achievement of Universal Primary Education (UPE). UPE implies that every child is enrolled in and completes full cycle of primary schooling.[7] As fundamental and laudable this aim is ,its achievement has been fraught with challenges which even the sustained efforts of world bodies like the UN, World Bank and UNESCO have failed to address fully since the Dakar and Millennium summit.

2. Universalization of Primary Education: Global Trends and Challenges.

The Overview section of the *EFA Global Monitoring Report 2012* (EFA-GBM) begins with the following observation; "Unfortunately, this year's EFA Global Monitoring Report shows that progress towards many of the goals is slowing down, and that most EFA goals are unlikely to be met. The report goes on to add, "On current trends, the goal of universal primary education (UPE) will be missed by a large margin…" [8].An analysis of the data and statistics provided by

EFA-GMR 2012 highlights that though some laudable progress has been made in the last two decades, the progress has neither been consistent nor universal. To illustrate, though the number of primary school age children out of school has fallen from 108 million to 61 million since 1999, but three quarters of this reduction was achieved between 1999 and 2004. Between 2008 and 2010, progress stalled altogether.

In 2010 twenty-nine countries had a net enrolment ratio of less than 85%. As many as 68 countries are far from achieving Gender parity in education and girls continue to be a disadvantaged group in as many as 60 of them. The disparities are also evident in the investment patterns of rich and poor households in education. Not only do the rural/ urban and gender disparities mar our attempts to meet the 2015 deadline, newer challenges are being thrown at us even as children enroll in or subsequently pass out of primary schools. Three pertinent challenges that demand immediate redress are;

- Ensuring completion of Primary Education Cycle,
- Strengthening infrastructure and capacity building initiatives for secondary schools and
- Improving the learning environment and quality of education.

The above listed additional challenges have only made the journey towards universalization of education for all children more difficult. Neither progress nor lapses have been consistent and universal. Serious lapses and delays are witnessed with respect to the countries with limited or deficit resources. As countries across the globe are not at par either economically, technologically or in their historical commitment to the goals of universalizing education, their journeys too have not been equitable thus demanding idiographic analyses. At this point we take up the case of India which, in addition to the challenges outlined above, faces challenges that are specific to it.

3. Education for All Children (EFAc): The Indian Chapter.

The commitment to Education for All Children till the age of 14 years is at least a century and a half old. These 150 years have seen India as a British Colony, as a country fighting for Independence; as a fledgling country finding its feet post-independence and finally as a neo-liberal economic and human resource powerhouse getting recognition on the world stage. The economic and political transformations have subtly transformed the vision of and methods for attainment of EFAc, too. These transformations have thrown up new challenges and newer solutions, too.

3.1 EFAc: Historical Context.

The recorded history of Indian commitment to Universalizing of Education in general and for children in particular dates back to the pre-independence India of 1911 when Gopal Krishna Gokhale introduced the “Free and Compulsory Education Bill” to the then British rulers of India. The bill was however shot down for various economic and political reasons.[9]

With the attainment of independence from the British *Raj,* India renewed its commitment to the Universalization of education through its Constitution in 1950. Article 45 of the constitution (under the Directive Principles of State Policy) stated that; “The state shall endeavour to provide

within a period of ten years from the commencement of this Constitution for free and compulsory education for all children until they complete the age of 14 years."[10]

It must be iterated that inherent in Article 45 was the concern for Early Childhood Care and Education (ECCE for children up to 6 years of age) as well as for elementary (not primary!) education (i.e. eight year of education for children from 6-14 years). Further, it provided for Free and compulsory education of all children to be financed by the state. These provisions surpassed the later expectations of both EFA and MDGs w.r.t the Universalization of Primary Education for children.

Therefore, whereas the Jomtien Declaration and the MDGs would later require commitment to Universal Primary education; India since independence was aiming at Free and Compulsory EFAc (0-14 years).

40 years later with the Jomtien Declaration in 1990, the international community agreed to settle for lesser aim. The following decade (1990s) saw the waves of liberalisation hitting the Indian shores. Among other things, it paved the way for international funding agencies in the policy discourses on Education,. The dilution of the Indian ideal of Universalization of EFAc up to 14 years of age was accelerated by their arrival.In the subsequent years two large scale programmes sponsored by World Bank; i.e. District Primary Education Programme (1993- 2002) and *Sarva Shiksha Abhiyaan* (2000-2010) were adopted with the intent of meeting the projected levels of EFA and MDG-2 and focusing on Primary Education.

The primary education led agenda hailed by the international community first in Dakar and then in New York, led to an amendment in the Indian Constitution which entailed a raging debate that still continues. The 86th amendment (2002) reads;
Article. 21A. The State shall provide free and compulsory education to all children of the age of ***six*** *to fourteen years* in such manner as the *State may, by law, determine*.

This amendment led to the expulsion of children from 0-6 years of age from the ambit of states responsibilities. Further, it allowed for idiosyncratic implementations by state government and funding stakeholders.

To comment on what was finally borne out of this systematic dilution of educational aims the following observation will suffice: it has been over 60 years since the constitution was adopted by India and over 20 years since the WCE-Jomtien declaration on EFA; yet till date more than half of the Indian children falling in the age range of 6-14 continue to be deprived of eight years of elementary education (Class I-VIII). A multitude of reasons may be furthered to explain this anomaly; the subsequent section tries to identify the most pressing of them.

3.2 EFAc: Targets met and challenges faced

Measured by the quantity-centric indicator of Net Enrolment Ratio (NER) India is set to attain the target of Universal Primary Education before 2015. As per District Information System on

Education (DISE) statistics, India's NER in the years 2008-09 and 2009-10 was 98.6% and 98.3% respectively. As a result, India is likely to achieve 100% NER for girls and boys alike ahead of 2015.

However, India's progress story is uniformly marred by the three-fold challenges discussed in the previous section. The subsequent section attempts to understand these challenges ads they manifest globally and with special reference to India.

1. **Ensuring completion of Primary Education Cycle** i.e. improving Global Completion Rate of Primary Schooling (GCR-PS). Both EFA-2 and MDG-2 categorically comment on the importance of completing the cycle of primary schooling. However in reality, striking contrasts are seen in terms of the global primary completion rate (measured by the gross intake ratio to the last grade of primary education) [11] with regional values varying from 70 per cent in sub-Saharan Africa to almost 100 per cent in Latin America.

With specific reference to India, the encouraging NERs notwithstanding, the Completion Rate presents a sorry picture! In 2008-09 the CR was 76% as against the NER of 98.6%. On a more basic level, whereas as per the ACER-2012 survey the enrolment rate is 97%, the daily attendance rate is only 71%. The lapses in attendance have direct implications for the loss of learning opportunities as well as opportunities to experience success later on.

The reasons for the variations in NER and CR range from policy and implementation challenges to financing and capacity building challenges. It is interesting to note that the lack of external financing in some cases is not as binding as the constraints imposed by lack of capacity or the policy framework [12].

2. **Strengthening infrastructure and capacity building initiatives for secondary schools**.

Globally, with more children completing primary education, the demand for secondary education is growing. In 2010, there were 71 million young adolescents (typically aged 12-15 years) out of school around the world. Of these, around 48 million lived in countries where lower secondary schooling is officially recognized as part of the compulsory education system.

India is one such country; it aims at Universalization of Elementary Education, but the secondary school system in India is currently not geared up to handle the inflow of primary school pass outs projected for 2015 and also to retain them thereafter. As per the Ministry of Human Resource Development data the NER in secondary Education was a mere 52.26% in 2005-06. According to the National Family Health Survey (2006) for the respective NAR/NER values of 69 % at the primary school level among children from poor families, the NAR at the secondary level is a dismal 29%. Similar disparities are observed with respect to gender. [13]

In view of the disparities in Primary and secondary NERs, it is imperative that secondary schooling too is prioritized. To focus on primary education is not to ignore, overlook or undermine the other levels of education. Primary education is at the same time an indispensible tool of initial empowerment as well as a feeder system for lower secondary schooling. Further, the assurance of availability of secondary schools after completing primary education increases

the incentive to complete primary school. Though the Universalization of Secondary Education has not been explicitly included in the EFA goals or MDGs, an expansion of secondary education significantly contributes to the expansion of primary education. Hence, it is important that initiatives aimed at primary education are augmented by an expansion of secondary education; so crucial to sustain the gains made by any surge in Global primary Completion Rates.

3. **Improving the learning environment and quality of education**.
Evaluations and assessments carried out under Global Monitoring of EFA goals have shown that children in many of the world's poorest countries can spend several years in school without learning to read a word. The Indian scene is no different; while 100 percent NER in primary schools is an interesting statistic, it becomes meaningful only if quality of learning can be ensured. The latest Annual Status of Education Report (2011) for rural areas indicates that 31.4% of class 3 children cannot read words in their own language. And 70.1% of them cannot solve a 2 digit subtraction problem. Similarly, 51.8% class 5 children cannot read a class 2 level text and 72.5% of them cannot do a simple division problem.

EFA-GMR identifies the quality (or the lack of it) of the teachers as the reason behind such shocking findings. Globally too, it has not helped that unlike EFA goals, the MDG-2 is firstly silent on the issue of quality of education and secondly equates education with schooling. The push in MDG2 for quantitative Universal Primary Education (UPE) has resulted in increased class sizes thus worsening Pupil Teacher Ratios (PTR) and negatively impacting quality of students' learning .

To conclude, India seems to be cruising swiftly towards the target of EFA 2 and MDG-2 if Net Enrolment ratio is taken as an indicator, but there are serious reservations on the aptness of NER as a true indicator. If NER is taken at face value, there is no challenge left and complacency can be welcomed. However, the true challenges continue unattended as discussed above.

A closer analysis reveals that each of the above challenge at the same time arises from, and has its solution in, the state of Teacher Education interventions. Thus looking for a solution to each one of them mandates that we focus our attention on teachers and teacher preparation as well.

- To illustrate, Completion Rate is threatened by the staggering number of students who drop out without completing the Primary Education Cycle. Apart from geographical hardships and financial constraints, girls and boys are also known to drop out because of the school environment, including experiences with teachers. As the *Thematic paper on MDG-2* points out, "…Despite the impact of any continuing economic and social constraints, once children are in school the decisions around whether to continue attending and the amount of learning which takes place depends largely on the teachers and the quality of classroom instruction." [1] Teacher attitudes go a long way in offsetting gender and socio-economic class based disadvantages once the students are enrolled for schooling. Similarly, the differences in learning styles between boys and girls though are less significant than the similarities, teachers if cognizant of such differences if and where they exist, can adjust their teaching and assessment methods accordingly and create conducive learning environments.

- The challenge of expanding Secondary Schooling to absorb the students finishing their primary schooling is partly a challenge about training the required number of skilled teachers. A lack of trained teachers, presents a major obstacle to achieving the EFA/MDG-2 goals. Presently, we have failed to manage the number of teachers needed to universalize primary education. The latest estimates suggest that 112 countries need to expand their workforce by a total of 5.4 million primary school teachers by 2015. In India alone, 523,000 teaching positions are vacant. Ensuring favorable teacher-pupil ratio and universal access to primary education in India requires an additional 510,000 teachers over and above current vacancies. In such a scenario, teacher recruitment for secondary schools is not even on the Indian radar yet.

- Finally, the issue of quality of education too needs a discussion on the number and nature of teachers engaging with UEE. Well-trained teachers are the single most important factor influencing the quality of children's early learning. Most countries have seen an enrolment boom in the last two decades which is not commensurate with the number of trained teachers available with them. One measure adopted by many countries in order to counter the ever bludgeoning teacher-student ratio is hiring Para-teachers. In Indian government schools as many as 12.76% of all teachers are actually para-teachers. These Para-teachers are typically secondary school dropouts from the local communities. As many as 49.8% of all Indian para-teachers are higher secondary pass outs or even less. Governments(whether Indian or otherwise) hire them as an emergency measure but may or may not provide them with even short-term training and support. Lack of systematic teacher training severely stunts the quality of Education in the long run.

  Another measure of quality of education is the school teachers-pupil ratio. As per 2006-07 DISE statistics, the pupil-teacher ratio across all Indian states is as unfavorable as 39.21. We have not fared well on the teacher pupil ratio, globally. .

  An acknowledgment of the challenges staring us in the face and the additional realization that each of these challenges mandates a sustained availability of well trained teachers instantly shifts the spotlight on Teacher preparation programs; it is time then that candid and sustained discussions are carried out on the role and mandate for Teacher Education Programs(TEP) for achieving the goal of quality Education for all children.

4. Teacher Education for EFAc : Issues and Challenges

The challenges to EFAc mandate two-fold efforts at capacity building. Firstly, it requires an expansion in the sheer reach of learning resources; human as well as material. Secondly, EFA entails large scale engagement of Teachers with basic skill set to provide quality education to learners. The first dimension is being probed enthusiastically, and technology has given us answers on expanding reach and ensuring accessibility. The second challenge though more basic has been more difficult to address.

The unparalleled might of technology in terms of ubiquity can be gauged from some basic data. For the first time in history, there are more mobile phones and tablet computers on the planet than there are people. There are over 3.2 billion unique mobile phone subscribers world-wide, making mobile phones the most widely used interactive ICT on Earth.

The Indian scene is equally encouraging. Mobiles, Computers and Broadband services have stormed the Indian subcontinent. As per census 2001, there are 5,93,731 inhabited villages in India. At the end of June-2011, 98.1% of the total inhabited villages in India have been connected by technology. Mobiles are the preferred technology for communication with the popularity of wire line access declining. Total Wireless (GSM + CDMA) subscriber base registered a growth of 4.94% in the second quarter of 2011 alone. Over a period of 12 years, internet subscriber base had increased by 97 fold from year 1999 to 2011.

Despite their ubiquity in India and given the unique types of learning they support, these technologies are ignored in formal systems of education. The fact that ICT and mobile learning technologies; in particular, have advantages of geo-spatial and temporal flexibility should contribute to their popularity as a mode of learning-teaching. The added benefit of no additional infrastructural costs can make them particularly useful in developing countries like India.

However, till the teachers are educated to harness the pedagogic potential of these technologies, there educational value not be realized. Thus, a shift to technological augmentation of teaching learning strategies mandates a change in the way we approach teacher preparation.

UNESCO, which has been particularly active in spreading a positive word about the potential benefits of use of ICT and Mobile Learning Systems, too realizes that a movement from wholly traditional classroom to an eclectic mix of face to face and ICT based teaching would necessitate a discussion on teacher preparation beforehand. UNESCO's research has shown that without guidance and instruction teachers will often use technology to 'do old things in new ways' rather than transform and improve approaches to teaching and learning.[14]

Yet another challenge to teacher education is posed at a more basic level. Pursuance of the goal of EFAc entails large scale engagement of Teachers with basic skill set and aptitude to comprehend and address the distinctive challenges of the learner groups. Whereas technology has the potential to ably play an assisting role, the primary role is to be donned by teachers. Before they can be tech-savvy teachers, they need to be just that; 'teachers'.

Thus the re-envisioning of teacher Education is to be informed by two concerns;
Firstly, the need to prepare 'enough' teachers who can comprehend, appreciate and address learner diversities in all its manifestations to ensure quality education and conducive learning environments. This entails addressing the issue of quantity as well as quality of teachers. Secondly, to prepare teachers who can seamlessly integrate technology in pedagogy and assessment and do so consistently.

5. Teacher Education for EFAc : Blueprint for Capacity Building.

At the outset, nomenclatures have the potential to direct our thoughts. Whereas, the phrase Teacher Preparation connotes a sense of 'readiness', the term Teacher Education connotes 'enabling' for future. Preparation is deterministic in that it readies one for definite situations and inculcates a fixed skill set to handle expected contingencies. Education breeds perspectives and unearths worldviews. To be Educated is to be empowered. It subsumes the capacity for transfer of learning and perspectives to newer situations and unexpected challenges. In this sense, then

the role of Teacher training is to prepare a teacher with the ability to customize and create rather than to follow convention.

5.1 Addressing the Quantity and Quality Deficit through Teacher Education

Teacher Education is both a noun and a verb. As a noun it denotes a systemic provision; as a verb it implies an experience. These twin conceptualizations in conjunction can address the quantity and quality deficits that impediment our move towards EFAc.

At the systemic level Teacher Education has to expand to generate the required number of trained teachers. To this end, Public-Private Partnerships(PPPs) must be mobilized to ensure that Teacher Education is expanded without discounting quality. More teacher training institutions need to be established. Existing Teacher Education Institutions need to operate at optimum levels. Multi-modal programs must be introduced with a strong theoretical component that can be transacted virtually. Though there is no substitute to field training, technology needs to be used unapologetically to augment the hands-on training that teachers receive as part of the practical work they undertake. This can include virtual exposure to varied learner contexts and cohorts. Quality Management of all Teacher Education programs must be prioritized.

An equitable emphasis is to be laid on the provision of quality In-Service Teacher Education (ISTE) Programs. Benefits of ISTE include reception of new information, practice of new methods of teaching, learning to develop new teaching materials and peer-learning through sharing of experiences of classroom problems and successes. In-Service Teacher Education must compulsorily include research components. As it is, there is a need to undertake more studies to understand the dynamics of learning in Multi-grade, multi-age and multi-ability classroom settings.

Another way of addressing the issue of numbers is to arrest teacher dropout rates and facilitate teacher retention. An earnest social dialogue with teachers can significantly enhance the ownership, implementation and success of policy reforms and field initiatives. In addition favorable salary structures, efforts to leverage social status of teachers, respectful working conditions and a two way open channel of communication are some other factors that can promote teacher retention and address the issue of quantity to a reasonable extent.

While addressing the issue of quantity is important; simultaneous efforts are to be made to address the quality dimension. Teacher Education Programs must equip teachers to comprehend, appreciate and address learner diversities in order to ensure quality education and creation of environments which are conducive to learning.

As a Teacher Educator the author has always believed that in order to produce quality teachers a Teacher Education Program must begin by cognizing some fundamentals about the learning–teaching process and subsequently structure its content around these fundamentals.

▪ **Fundamental to the teaching-learning process is the nature of the Learner and the teacher.** Learners differ in their life experiences which result in differences in personality and learning styles. Most surface differences among the learners could be traced, with some effort, to a more fundamental level i.e. the life events of such learners. As an individual, a teacher too is a product of her context. Though this contextual identity pervades our existence, in case of a

teacher it is seldom cognized and rarely challenged. For a learner however preserving this identity may be a challenge in itself.

A successful teaching-learning relationship demands mutual understanding and collaborative partnership between a teacher and her student. Mutual understanding may be initiated through, though by no means guaranteed by, trying to understand each other's nature and context. Collaborative partnerships are the next step. In a country like India where most of the target learners in the rural belt are first generation learners, the need for a collaborative relationship between the teacher and her learner assumes un-paralleled importance. In first generation households parental scaffolding in academic domain is a serious casualty. Thus in the context of EFA the importance of Collaborative Partnership cannot be over-emphasized. The preceding discussion has profound implications for Teacher Education Programs. These programs have to prepare teachers who are inclusive, reflective and analytical. They have to be child-centered rather than teacher centered; they have to be context-centered rather than content-centered.

- **The classrooms today are multi-cultural, multi-lingual and essentially heterogeneous.** Classrooms are living microcosms that replicate the structure and dynamics of society outside their walls. Classrooms would have regional and linguistic factions. They would have Gender as an embedded theme. There would be socio-economic divides waiting to get reinforced. A teacher may unwittingly become a re-enforcer of factions if she is not aware of the complicated rubric of a classroom. Teacher Education Program must instill a discerning attitude and inculcate sensitivity towards this heterogeneity. To enable a teacher to handle these diversities, teacher education curricula must foreground diversity in its discourse and introduce responsive and inclusive pedagogies. Yet at another level a teacher must be educated as an agent of social change. She must facilitate socio-psychological mobility of her learners above and beyond the sociological categories of gender, class, region etc. The readiness for such psycho-social mobility comes as a result of critical pedagogy and inculcation of life-skills. A Teacher Education Program envisioned to address, among other things, the EFA challenge must weave both Life-Skills and critical pedagogy in its curricula.

- **Education is for Empowerment.**

The emancipatory potential of Education is best comprehended against the backdrop of Millennium Development Goals. Education is empowering in that it bestows the knowledge and skill set to interact meaningful with the world around us in all its complexities. The improved quality and effectiveness of education rests on the re-examination of the purpose of learning and the revisiting of what can be expected through education pedagogy, a gender-sensitive and culturally relevant curriculum, and a broad learning environment.

This perspective when adopted would transform the way a teacher looks at her role in the classroom as well as the entire educational process. The rigidity of curriculum and perspectives on 'Knowledge' would be incessantly questioned. To rise up to the challenge, Teacher Education Programs must incorporate the themes of contextual learning, Situated Cognition and Education for problem-solving. For a teacher so trained Education would become a lived reality rather than a read/ studied reality. Such an Education would give the youth of tomorrow a voice to ask for their right to a dignified life; which is the mission of both EFA and MDGs.

- **Assessment is a means; never an end.**

Once the above stated fundamentals are understood, the concept of assessment too undergoes a metamorphosis. Teacher Education Programs must prepare teacher with a revolutionary understanding of Assessment.

Any meaningful assessment can be done no other way but in an idiographic manner. Norm-referencing is passé. One-test-fits-all has lived its life. Summative assessment may be of enrichment value, but the primacy is to be given to formative assessment. Assessment can no longer be a stand-alone exercise. It must precede, accompany and succeed all learning experiences. More importantly, assessment methods must cognize the contextual and linguistic barriers to learning as well as performance. It must take into cognizance the nature of teaching learning materials used and the mode of instructions utilized. Then again, Assessment has to be participative. The learner must be a continuous and active partner in designing and evaluating learning experiences. Lastly, assessment must be cyclic in nature. If Education is for Empowerment, assessment can only be to strengthen the process of empowerment. It can no more afford to have a selection-rejection orientation.

Above and beyond the traditionally rooted-for skills, if a Teacher Education Program can sensitize teachers towards the nature of their learners, get them to consistently discern and respond to learner diversities, see Education as the end of which assessment is a mere means, chances are that learner dropout rate would be significantly arrested. A teacher so educated would be able to achieve the twin objectives of creating positive learning environments and nurturing quality educational experiences among her learners. Once an array of such teachers is in place technology can be used to widen their reach in terms of students accessibility and learning resource generation. This brings us to the second concern, namely, to prepare teachers who can seamlessly integrate technology in pedagogy and assessment and do so consistently.

5.2 Addressing the Quantity and Quality Deficit through Teacher Education

As discussed previously, the advent of ICT and Mobile Learning Systems (MLS) has been keenly watched for their potential to improve educational equity by introducing new pathways for learning and improving existing educational offerings. Though the use of such technological augmentation is very limited, wherever it is indeed being used, these projects do not replace but rather complement existing educational investments such as textbooks, infrastructure, hardware, training and content.

Given the astounding levels of projected penetration of various mobile devices, the integration of ICT etc. in pursuance of EFA is more a compulsion than choice. As a result various Governments facing the fast approaching deadlines to meet EFA targets would ensure that Teacher Education Programs too incorporate ICT-MLS as compulsory curricula sooner rather than later.

The introduction of ICT-MLS has unique advantages when compared to traditional forms of teaching [15]. To exploit the potential of the booming technology it is imperative that Teacher Education Programs, too, integrate it in their curricular structure as well as operations. In this process some teachers may need bridge courses or workshops and /or orientations to the

technical aspects of ICT-MLS. A Teacher Education Program must make provision for such refreshers/ workshop courses for both Pre-Service and In-Service Teachers.

Once a reasonable degree of comfort is achieved in handling ICT-MLS, priority is to be given to educate teachers in the use of ICT-MLS to transact subject specific contents. Teachers must be made aware of and receive hands on training in designing ICT-MLS informed pedagogies.
The Teacher Educators may themselves exhibit illustrative usage of ICT-MLS as they transact the Teacher Education Curricula with trainee teachers. Specific modules in teacher training as well as content related to continuing professional development can be designed and made available through ICT-MLS.

Once in Field ICT-MLS keeps the channels of academic communication open. Specific teacher-centered resources can be made available by Teacher Education Programs. Teachers educated in the usage of ICT-MLS can forge a learning community transcending geographical boundaries and create a meaningful discourse on field related problems, learning therefrom and innovative solutions tried by them.

Teachers in field can use ICT-MLS to regulate and reinforce content learning among their students. It also provides a platform for cultural and academic exchange among various learning cohorts provided the respective teachers take the initiative and facilitate such an academic exchange.

ICT-MLS can be of immense use in the field of assessment as well. Teacher Education Programs must also educate their trainee teachers to utilize the potential of ICT-MLS for creating elaborate learner portfolios, keep them updated, share them with the intended learners and their families and use them to track the learning curves of the learners across disciplines and skills. ICT-MLS with the potential for providing geo-spatial location services, personalization of user interfaces, multi-media and multi-tasking abilities, communication services, ubiquity and economy are the much awaited ally to help teachers counter the specific geographical, temporal and financial impediments to EFA. However to be able to utilize technology in the pursuit of EFA teachers need capacity-building efforts that are thorough and consistent. It now rests on Teacher Education programs to partake of the responsibility.

6. Conclusion:

Inherent in every problem is the possibility of a solution. The fact that most countries are set to miss the EFA deadline of 2015 gives us an opportunity and a reason to re-evaluate the aims we have been pursuing. In doing so, there are at least three lessons to be learnt from the Indian constitutional commitment to EFAc.

Firstly, the global community must reposition EFAc (0-14 years), instead of Primary Education (6-11 years) as the aim. Secondly, 'Free' and compulsory Education must be stressed instead of compulsory education alone if we truly want to extend the benefit of the attempts to Universalize Education to the farthest sections of society. Finally, unlike MDG-2, both the Indian constitution and EFA goals focus on Education and not schooling; that there is a difference between the two has been amply proved by the increasing Net enrolment ratios on

one hand and the declining levels of learning on the other. Therefore quality of Education must be ensured and NER must not be considered a primary indicator of success.

Finally, it must be acknowledged that teachers are the fulcrum of all educational interventions. The nature of the teaching-learning process is such that any improvement in the quality of teachers would result in an exponential effect on the quality of learning and in longer run; the learners. Quality teachers have the potential to change the world. Given that we live in a world that is awaiting change, this potential must be harnessed on priority. Teacher Education programs can expedite such change by quantitative and qualitative capacity building. Technology can ably support such efforts at capacity building. A sustained effort is to be made to incorporate technology enabled learning in, and tailor-made, teacher education programs to reflect and support the aim of Education of All Children.

Endnotes:

1. The phrase 'Education for All Children' is taken from Article 45 of the Constitution of India wherein it is stated that; "The state shall endeavour to provide within a period of ten years from the commencement of this Constitution for free and compulsory **education for all children** until they complete the age of 14 years."

2. The six EFA goals were identified as :
    1. Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.
    2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality.
    3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.
    4. Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.
    5. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.
    6. Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

3. The eight MDGs were operationalized and stated as:
    1. Eradicate extreme poverty and hunger
    2. Achieve universal primary education
    3. Promote gender equality and empower women
    4. Reduce child mortality
    5. Improve maternal health
    6. Combat HIV and AIDS, malaria and other diseases
    7. Ensure environmental sustainability
    8. Develop a Global Partnership for Development

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