



Centre for
Education, Innovation
& Action Research

*Initiative for
Excellence in
Teacher Education*



In-service Teacher Professional development: *Perspectives and Possibilities*

New Delhi,
28-29 April, 2018



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Tata Institute of Social Sciences,
Mumbai
&
Ambedkar University, Delhi

The first Roundtable on

**In-service Teacher
Professional development:
Perspectives and Possibilities**

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The present discourse on in-service teacher development (also known as teacher professional development, TPD) in India is dominated by concerns emerging from the results of large-scale assessments, such as the school “Board” examinations. These concerns have engendered a narrative of ‘failure’ and ‘teacher deficiency’. The role of Central and State governments, higher-education institutions and non-governmental organizations is increasingly being defined by the need to respond to these failures and fill ‘the gaps’. Thus, attendant conceptual architecture is built around ‘restructuring teacher knowledge’ and ‘offering professional growth’. Moreover, there is also, simultaneously, a sense of promise of—and futility over—achieving ‘impact’. One of the reasons for this is the limited understanding, from a systemic viewpoint, of teacher development, both as a concept and an area of inquiry (Fullan and Hargreaves, 1992).

Considering these as the context for in-service teacher development, a two-day roundtable was conceptualized to examine the questions around teachers’ knowledge and motivation, their voice, agency, professional formation and mobility. The two-day Roundtable, ‘In-service Teacher Development: Perspectives and Possibilities’, was held on April 27 and April 28, 2018, at Ambedkar University, Delhi. The roundtable brought together teachers, scholars and experts from civil society organizations for a critical dialogue on the theme of in-service Teacher Development (See **Annexure 1** for the schedule of sessions, **Annexure 2** for the list of participants, and **Annexure 3** for presentations). The discussions were spread over nine sessions across two days as indicated in the Annexure 1. This report is a summary of the discussions in the sessions.

During the two days of roundtable, participants from diverse backgrounds—ranging from teachers, academicians, researchers and people working in the area of in-service teacher education in NGOs—shared their perspectives and experiences about in-service teacher education. They engaged in a reflective dialogue, sharing experiences and perspectives on how to move from “working on teachers” to “working with teachers”. In the process, a critical understanding of the cultural myths of being and becoming a teacher was also developed.

The roundtable was aimed at providing a platform for sharing experiences in the use of ‘alternative’ models of teacher development and explore the diversity in thoughts about teacher knowledge, material development, teacher identity and motivation. The rich and stimulating discussions that ensued as a result of experience-sharing, challenges, questions, failures, learnings and possible theoretical models laid the ground for the rather ambitious task of working ‘with’ teachers for their and our own professional development. Over the two days, individuals and groups who have worked in the in-service space at different sites, employing a range of media and pedagogic forms, shared their reflections and ideas for teacher development that evolved through and were guided by—the work with teachers, as well as the possibilities that appear worth pursuing in future courses of action.

Several themes emerged during the discussions, such as the different forms and structures of action in teacher development which influence the design of in-service teacher education and resources. The need for professional differentiation, mobility and pathways for in-service teachers through engagements in in-service programs was identified as an important theme that has remained largely unaddressed till the present. Participants also felt that policy and advocacy is needed for formalization of in-service teacher development sector with the government.

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THE SESSIONS

The present discourse on in-service teacher development (also known as teacher professional development, TPD) in India is dominated by concerns emerging from the results of large-scale assessments, such as the school “Board” examinations. These concerns have engendered a narrative of ‘failure’ and ‘teacher deficiency’. The role of Central and State governments, higher-education institutions and non-governmental organizations is increasingly being defined by the need to respond to these failures and fill ‘the gaps’. Thus, attendant conceptual architecture is built around ‘restructuring teacher knowledge’ and ‘offering professional growth’. Moreover, there is also, simultaneously, a sense of promise of—and futility over—achieving ‘impact’. One of the reasons for this is the limited understanding, from a systemic viewpoint, of teacher development, both as a concept and an area of inquiry (Fullan and Hargreaves, 1992).

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A summary of the presentations and discussions which took place during the two-day roundtable are presented here. In the sections below, we provide a brief description of the talks and/or presentations made by the speakers at the roundtable. The talks were followed by discussion with the audience. A

summary of these are also presented in this report.

Session 1:

The need for a Roundtable on In-service Teacher Development (*Prof. Padma Sarangapani*)

Prof. Padma Sarangapani explained the context of in-service teacher development and the need for forming a consortium of different agencies who are engaged in providing in-service professional development opportunities.

Prof. Sarangapani: The historical perspective of teaching, which served as a motivation for designing in-service teacher professional development opportunities with the participation of various government as well as non-government agencies, civil society organizations, is a deficient one. This perspective, which does not discriminate between the workload and responsibilities of a novice teacher and those of an experienced one, an approach to the design of in-service teacher education without a vision of professional growth for experienced teachers. There are very few roles available to mature or experienced teachers' professional development within school institutions.

Another important issue is the relation between INSET and, its intersection with the idea of folk pedagogy that is rooted in Indian culture. This is because it has a significant bearing on the way teachers' agency and teachers' knowledge is conceptualized and operationalized in the cultural discourse, and its relation to teachers' learning and development of their knowledge. Professional learning can be social and hence the role of reflection in development of pedagogic practice needs to be considered for design of professional development.

It also needs to be noted that, presently, the impact of INSET education is seen (and measured) through its impact on teachers' practice, as evident in achievement of student learning outcomes or teachers' beliefs or attitudes, their perceptions of self-efficacy and their self-confidence. In this regard, Bernstein's theory would be useful for conceptualizing the teachers' worlds as intersecting fields of officials discourse of policy, teachers' conceptions of their practice, and the pedagogical space formed by the professional community of teacher educators. The design of workshops and classroom teaching need to be informed by recent development in the field of teacher education like the possibility for creating communities for professional development.

Finally, I would like to mention about how this roundtable came about. It happened during a conversation with AUD faculty and CEQUE, both of which have a common interest in teacher education, and who agreed on the need for higher education institutions to work in collaboration towards achieving clarity about their respective roles in the teacher education space and then shape these roles such that they move from the periphery to playing a central part.

Session 2:

Experiences of being—and becoming—a teacher: Role of in-service teacher development programmes

In this session, three teachers with diverse experiences of in-service education spoke about their experiences of being a teacher and the influence of in-service teacher education on their beliefs and practice. The first of these teachers was Mr. Natwar from (school name) from Rajasthan, who was a participant in an online blended course on "Communicative English teaching". He was followed by Ms. Amarjyoti Sinha from Bagtarai Government Higher Secondary school, Dhamtari (Chattisgarh) who had participated in a course, "Reflective Mathematics Teaching".

Both the courses were part of a post-graduate certificate programme on "Reflective Teaching with ICT" at Centre for Education, Innovation and Action Research (CEIAR) at Tata Institute of Social Sciences. The third teacher, Mr. Prahlad Kathole, was associated with QUEST (an NGO) as a school teacher.

The three teachers shared their thoughts: about how they got into teaching profession, on the challenges that they faced while teaching in rural government schools, how in-service teacher education made an impact on their teaching and classroom practices, and contributed to their professional development.

Mr. Natwar: I must admit that I became interested in teaching only because my friends were applying for teaching jobs. It is a challenge teaching in a rural school; and being an English teacher in one is an even bigger challenge. Students attend school more for the mid-day meals than for an education. Initially, I was hesitant speaking in English, an inhibition that is common among children also. This is because, in my state (Rajasthan, a Hindi-speaking one), one is not exposed to the use of English as a medium of instruction in rural settings, where Hindi is the dominant language.

Thanks to “Communicative English Teaching”, which was organized through CLIX (Connected Learning Initiative), I was able to use CLIX’s English student modules. It gave me the opportunity to expose my students to use of English language—with the proper pronunciation—with the help of videos. Regular practice with these modules helped in improving my students’ English speaking and listening skills.

I must also mention that the motivation for my taking the blended online course was the opportunity of certification from a renowned institution like TISS. I now engage in discussions on a chat group, “Community of Practice”, in Telegram. It keeps me connected with my peers and resource persons.

Ms. Amarjyoti Sinha: As a child, I wanted to be the peon who rang the school bell rather than becoming a teacher! Later, after I became a teacher, I participated in a post-graduate certificate programme, “Reflective teaching with Information and Communication Technology (RTICT)”. I did two of the courses in the programme. One was on “Digital Literacy” and the other on “Reflective Mathematics Teaching”. CLIX’s modules in mathematics helped to improve my students’ learning of digital skills, understanding of mathematics, as well as the confidence and autonomy to explore modules on their own.

Use of ICT-based CLIX modules has enabled me to go beyond textbooks. The Geogebra software, a part of the geometric reasoning module developed by CLIX, is a lot like a student’s “compass box”. The software has all the tools for drawing various geometrical shapes, the only difference being that they are done on a computer.

Autonomy in student learning has improved considerably. I would like to explain this with an example. One of my students created several designs and identified different features by exploring, several new features in Turtle logo software. The CLIX Lab has become a place where teachers and the children learn together.

It is my belief that the teacher’s physical presence is important for student learning. To improve my students’ confidence, I discuss with them the different ways they can verify their answers without the help of teacher or textbook. In the modules, two of my students arrived at different answers by applying different (but logically correct) methods which I appreciated.

There are also gaps in in-service teacher education. Back-to-back trainings are an exercise in futility. It is an even bigger problem when teachers do not have a say in the type of training they need and when. The resulting extended absence from class (for training) is a loss for the students. In my case, I was able to complete TISS’s online blended course by doing a little bit daily and keeping track on my progress page. The course gave me the freedom to engage with it in my own time and without upsetting my teaching schedule. This roundtable is my first and, initially, I was nervous about sharing my views and experiences.

Mr. Prahlad Kathole: I am a primary school teacher working in a tribal district in Maharashtra. Working in a tribal area presents a unique set of challenges. I travel 51 kilometers from my home to my place of work. The major challenges faced by schools in such areas is the transfer of teachers, lack

of infrastructure and low motivation levels among students. Often, the disinclination (or inability) of the students to learn provoked me to use the method that was common during my schooldays. Maar khaa khaa ke padha to wahi istemaal kiya. I would cane the students. To me, this seemed a normal thing to do because I had studied only by being beaten or punished in various ways.

But my perspective about teaching changed with reflection, as well as the various INSET activities that I engaged in over the years. These included involvement with a teachers' forum, working in a study group in 2010 and studying for a MA in Elementary Education from TISS.

There several memorable moments. The study group would meet once a month on Sundays and discuss various issues in education and topics of interest for teachers. We would also read articles translated from other languages. Gradually, these interactions led to theory being put to practice in the classrooms, and knowledge-sharing (by writing books, organizing events and arranging training workshops for teachers). We leveraged the potential of ICT to connect with teachers, which resulted in wider community participation in the discourse.

Social media platforms like WhatsApp were used to maximum advantage. The members of the study group would even share assignments and papers. This helped in the development of the teachers' community. My experiences with the study groups were highly rewarding, which is in complete contrast to the frustration I felt with the passivity of the in-service teacher training courses I attended where there is little space to question and critique, and the talk about the construction of knowledge is just talk.

Prof Devika Sharma read out a letter written by a Delhi school teacher who participated in in-service teacher training by SCERT. The letter mentioned how the objectives of SCERT were flawed and lacked clarity. The letter-writer was disappointed that despite the emphasis on academic development of the teachers, they were denied access to libraries, such as the Teen Murti Library.

Interaction with the audience

Before its conclusion, the session was thrown open to the audience for questions and comments.

Mr. Prahlad Kathole: (To a question about his bad experiences with government-organized trainings), "*Zyadatar trainings is cheez pe focus karti hai ki padhna kaise hai, na ki padhana kaise hai*" (The trainings mostly focus on how to [make students] study and not on how to teach).

Ms. Amarjyoti (on what she learnt from her students' curiosity in aiding the learning process): *Bade ye sochte hai computer me kuch ho jaayega aur bachhe sochte hai ki kuch to hoga, aur yahi farak hai* (when working with computers, adults are apprehensive will something will happen to the computer, indicating a fear of damage from mishandling, while the children expect that something exciting will happen with [using] the computer. Students learn to solve problems on their own, even technical ones, by trial and error.

Mr. Prahlad Kathole: I would also like to mention here that teachers are more receptive if the trainer had been a teacher and is speaking from personal experiences.

Ms. Amarjyoti (on self-directed learning): It creates a democratic classroom. There is less hesitation to participate in learning by students in a computer lab than those in the classroom. In fact, even those pupils who are not regarded as 'not-so-bright' are actively engaging in the computer lab space and develop confidence in the process.

Ms. Amarjyoti (on how power relationships between teacher and students impacts classroom culture): The position of the teacher is considered lower as compared to other administrators. There was less hesitation to participate in learning by students in a computer lab than those in the classroom. In fact, even those pupils who are regarded as 'not-so-bright' are actively engage in the computer lab space and develop confidence in the process.

Mr. Prahlad (responding to “Do some students dominate the others in their class?”): Yes, such a problem exists. It is mostly rooted in caste and religion; however, they are not as much as the ones arising from gender differences.

The session also devoted considerable attention to the experiences of various teachers who practiced in diverse settings. These teachers discussed the challenges and difficulties they faced and how they tried to overcome them. Sometimes the problems morphed into different forms with time. There was broad agreement on how teacher training workshops were conducted and that the system should not focus only on the education and learning of the children, but equally so on the educators because it is only then that they would be equipped to enable their pupils’ learning. It is important to empower the teachers first.

Session 3: Teacher Agency and Teacher Knowledge

There were two talks in this session. The first was by Rohit Dhankar on the theoretical underpinnings of the constructs of teacher agency and knowledge. The second was by Ruchi S. Kumar who discussed the findings from her doctoral research on the interactions between teachers’ beliefs, knowledge and practice, and how the teacher’s agency plays a role in the way a teacher participates in the workshops, as well as classroom settings.

Prof. Rohit Dhankar: We must distinguish between “agency” and “autonomy”. Agency is “an action to initiate something and there is conscious effort to build the capability to initiate something without any conscious criteria”. On the other hand, autonomy is “doing or thinking and exercising your agency on the basis of some kind of conscious criteria”. This definition also expounds the concept of “rational autonomy” because criteria should be publicly articulated and justified. Today, there exists a gap in in-service education in building this kind of knowledge because the emphasis of the training programmes is on activities, techniques and skills that are regarded as “deficient” among teachers.

Many teacher education programs are based on either some new content that is introduced in the curriculum or the hard spots. But I doubt whether these activities help to make the teacher a rationally autonomous decision-maker in education, as well as in his/her interactions with the children, and is able to integrate ideas into some kind of coherent framework, situating himself/herself in society and in the world of education.

To build an education system as outlined in NCF 2005 curriculum framework, the teachers need to be motivated internally rather than externally. Teacher knowledge can be construed as developing an understanding of human beings and their capability, considering humans as inherently cultural beings. Therefore, teachers need to develop an understanding of relationship between humans and society, as well as the relationship between society and education, to work collaboratively with other teachers.

The second important area of teachers’ knowledge is related to how humans learn and specifically, the psychological as well as epistemic aspects of learning and its relationship with the pedagogy that is adopted and is organized, which is based on the experiences of the child, to develop what is considered as pedagogical content knowledge. The teacher needs to reorient the content by situating his or her subject area into the entire curriculum, based on the inherent reason of why those subjects, along with others, need to be studied at that level within the eight years of elementary education.

The role of reflection is important for developing pedagogical content knowledge as it helps to evolve a conscious criteria for actions; but this is difficult for teachers as they are not able to form the propositions and principles about how the human mind works. Here, there is a dual consciousness at play: one that is directed outward at the world, and the other being the “meta-consciousness” which is constantly “watching” one teach. The one watching is doing the reflection or supplies the data for reflection. Publicly articulable and justifiable knowledge can be created only through developing this meta-consciousness which will help teachers become autonomous. Therefore, there is the need for work on developing such knowledge and consciousness in teachers, both in pre-service as

well as in-service teacher education. This can be done by gaining an overall perspective followed by needs-based assessment. This will be challenging because a huge database about teachers' needs and preferences would be required to be maintained. In addition, the establishment of voluntary teacher forums—or other collectives where teachers come together—must be encouraged.

In her address, **Ruchi S. Kumar** presented data from her doctoral thesis about teachers' beliefs on the professional development of in-service mathematics teachers, and the role of belief and knowledge in teacher professional development.

Dr. Ruchi S. Kumar: A teacher's knowledge plays a significant role in shaping his/her behavior and the decisions taken in the classroom. I would like to use an example to distinguish between beliefs and knowledge. A common belief is that only one method should be taught to students for solving a problem. However, knowledge is the teacher knowing that there can be multiple methods to arrive at the correct answer. Both belief and knowledge interact in classroom teaching.

While knowledge can be consensually developed in a community, beliefs may act as hindrance to the teacher from using that knowledge. But at the same time, some beliefs may act as a stepping stone for adopting new practices. Therefore, pedagogical content knowledge is necessary because it is an integration of subject matter and pedagogy in meaningful ways. This has not received focus in most teacher education initiatives. Another important aspect of teacher knowledge is specialized knowledge that is needed for teaching a discipline. This develops from practice as well from professional development opportunities. Some of the examples of specialized knowledge for teaching mathematics are finding an example to make a particular mathematical point, identifying what might be easier for a student to understand and what might be difficult, knowing different types of representations for a particular knowledge and being able to connect to the central idea behind a particular representation.

In the study, thirteen government teachers had participated in a professional development initiative of Homi Bhabha Centre for Science Education. Analysis of teacher interviews and responses to questionnaires revealed that the teachers showed a preference for certain core teaching practices like explaining the procedure, using examples for solving problems; repeated practice with similar problems; focusing on quick solutions or shortcuts; and adhering to the textbooks. Practicing with activities, connecting mathematics to daily life and using the mother tongue were considered as peripheral to their practice.

Analysis of teachers' participation in the workshops designed to promote student-centric teaching indicated that the teachers exhibited their agency in workshop settings through anticipation of students' responses to tasks set for them, articulation of concepts and beliefs, sharing of underlying concerns, and challenging the pedagogical approach with open-ended probing and providing alternative viewpoints, as well as with their reflections on teaching. One of the teachers in my study, who was positively inclined towards student-centred teaching, highlighted with examples the challenges faced by the teacher while implementing this approach.

One of the problems faced by this teacher was how to address equity concerns in the learning process while aiming for a certain learning outcome. This sometimes led to conflicting objectives. In the example discussed by the teacher, the aim was that her students must develop students' mathematical reasoning skills. Her approach was to facilitate discussion in her class and providing every child the opportunity to participate. To encourage a girl student, the teacher felt compelled to set the learning task to a lower level and hence, did not achieve the learning goal for that exercise, which was mathematical reasoning.

Audience Interactions

The talks were followed by interactions with the participant of the round table. One of the questions posed to Rohit Dhankar was on 'intuitive conjectures' by teachers—whether they help teachers

to think rationally; and whether all human action is not necessarily rational and that they are used mainly to justify failure. On the role of culture there was a comment that there are two distinct types of culture—one that is developed in a workshop or in a teacher education setting, and the other that refers to folk pedagogy culture.

Prof. Rohit Dhankar (in response): There is a need to study the impact of teachers' beliefs on teaching mathematics, and making a discussion of these aspects a necessary part of teacher education. These relationships, even though abstract, will impact their pedagogy as, ultimately, disciplinary knowledge is an extension of everyday knowledge. Thus, all these discourses in different cultural settings help make meaning out of experiences at different levels. Taking part in discourses and politics is unavoidable since education is not possible if one does not want to influence other person's thoughts or behavior.

Dr. Ruchi Kumar (responding to a question on the role of textbooks in influencing teaching): In my study, the teachers used the new textbooks designed by NCERT, which were based on the recommendations of NCF 2005. Although NCF 2005 had suggested that teachers should go beyond the textbook, the system expected the teachers to strictly follow the textbook. This was clearly mentioned in the various circulars and notices issued by education departments of the states and centre. The teachers were required to adhere, without deviation, to the teaching plans in the academic calendar. This resulted in a superficial following of the textbooks.

Dr. Ruchi Kumar (on teachers' social beliefs impacting learning of mathematics): Since focus of my presentation was about teachers' mathematical beliefs, I would like to clarify that teachers' social beliefs were included in the study and were assessed through questionnaires and interviews. Although teachers did not overtly refer to caste, the questions were related to the gender and socioeconomic backgrounds of students. It was found that teachers responded positively in questionnaire; however, the interviews revealed their biases against the socio-economically weaker students. The teachers had reduced the conceptual load on these students. This was done by giving them easier questions to practice with and memorise them so that they could pass the exams.

Dr. Ruchi Kumar: on articulating dilemma and how anticipating student response can be considered as reflection of teachers' agency in workshop settings. Teachers do not get the opportunity to share their knowledge and views in traditional workshop settings. Thus, by anticipating student responses, a space is created for teachers to exhibit their agency in workshop settings through articulation of his (or her) knowledge. Articulating dilemmas help in critical analysis of practice rather forcing its unquestioning implementation in the classroom.

Session 4:

Models and practices of in-service teacher development

In session 4, there were three addresses by representatives of different NGOs who discussed their models of in-service professional development, which were developed over years of working in the field, as well as the results achieved in terms of capacity development of the teachers and student learning outcomes.

The session began with Ms. Keerthi Jayaram's talk on "In-service capacity building for building foundation in early literacy and learning". This was followed by Ms Shubra Chatterji's address on "Capacity-building of teachers in early literacy and library programmes". The third talk was by Ms. Uma Kogekar, which discussed the "CEQUE model of in-service teacher professional development".

Ms. Keerti Jayaram (associated with the NGO, Early Literacy Promotion (ELP): I would like to share my NGO's work in Delhi and rural Ajmer (Rajasthan), which covered government schools as well as for out-of-school children. From working with government schools in Delhi in 2006, we progressed to community-level engagements and capacity-building for teachers by 2008.

After evaluating their early literacy remedial programmes for Grades I to V over a year, our focus shift-

ed to building the foundations in Grade I and II. Our work attracted. The Rajasthan government which sent the teaching learning material to 14,000 schools in seven districts of the state. ELP then engaged in capacity-building of the teachers through a cascade in-service training model by working with 23 local resource persons who had a formal qualification as teachers (B.Ed).

ELP wanted to go beyond the concerns of access and outcomes and thus, adopted equity and social justice in its framework. We stressed on understanding the natural ways that students learn (which is very different from way adults learn) and the need to ensure that each child is treated equally inside classrooms, which is of crucial importance in a society that is highly stratified and patriarchal, such as that which exists in Rajasthan. We also tried to understand how relationships support learning in children, how these relationships must be nurtured to create a learning environment for the child.

ELP's work is informed by the discourse on the theory and meaning of literacy. We view literacy as social practice (an idea which was developed in the 1980's) which goes beyond the conventional perspective of seeing it as an autonomous, neutral cognitive process, which was popular in the 1970s. Our approach requires conversations about the children, their backgrounds and histories, languages and learning needs, the experiences they been exposed to, and their interests.

In our capacity-development programmes, ELP worked with the teachers, enabling them to create inclusive and nurturing classrooms; understanding the cultural, emotional, social reasons for participation and non-participation; to recognize individual differences between children and their needs, and respond to them; and encouraging shared learning, questioning, creative and critical thinking in children to make success achievable for each child. ELP's trainers discussed a range of learning environments with the teachers, as well as how they supported (or hindered) learning. These environments could be non-threatening and accepting or hostile, unfriendly and discriminatory; stimulating or sterile; responsive or passive; physical spaces that allow multiple opportunities for active learning or controlled and structured ones that provide limited opportunities for learning; or honour learner diversity or cater only to dominant groups.

We argued that the shift from oral to written is not a natural one. The teachers now understand that early literacy is being able to make sense of what one sees, hears or reads; and being able to share one's ideas, thoughts and feelings through spoken, pictorial or written communication. Literacy also means being able to think independently; becoming literate cannot be understood as merely learning the alphabet or being able to read or write from prescribed textbooks.

ELP's framework for early literacy was developed in collaboration with the teachers. We identified four levels of complexity for reading and writing: decoding, making meaning, using texts meaningfully and responding critically to texts. To communicate this to the teachers, we used the metaphor of the hand, avoiding jargon. The first four fingers signify listening, reading and writing. The thumb represented thinking.

Thinking is important to language learning. Soon, the teachers started using the "thumb" in all activities. It was an exciting experience for the team. The method worked because it was simple to use and easily remembered while engaging with children. It also resulted in a significant change in the quality of teaching.

ELP's programme is structured; but it is also flexible which allows teacher agency and autonomy. An implementation framework was developed which is based on four parameters: Reading & Talk time, Word Study, Writing & Expressing, and Skill Building.

During the course of our work, ELP had to negotiate with the government and the system for various aspects of the programmes. For example, at the macro-level, there was a debate on whether to have a one-size-fits-all programme using predetermined content or a contextualised programme (with predetermined goal and flexible content) for building bridges between the children's worlds and that of the schools. ELP was able to convince the Rajasthan government to allow them to engage with students of grades 1 and 2, the aim being to ensure that the children will be reading the curriculum

content and doing the exercises on their own. This required analysis of the issues related to student assessment, such as whether it is meaningful, simple, efficient and not time consuming, identifies the strengths and gaps, and informs both learner and teacher. It was also necessary to determine whether the assessment was challenging or intimidating and allowed self-evaluation, critical reflection and independent learning, and that the results are supported by both quantitative and qualitative data.

ELP's TPD approach included

- Creating conversations which are grounded in classrooms and learning communities,
- Developing models of good practices and demonstrating them,
- Nurturing through guided practice and/or mentoring;
- Building conceptual clarity and content knowledge;
- Knowledge sharing and peer learning;
- Reviewing and reflecting;
- Creating learning communities;
- Providing accessible support.

In the TPD, there is a provision for two types of contact points: one is at the week-long or ten-day workshop and four to five contact points at the participants' classrooms. Fifteen demonstration classrooms have been set up for exposure-based capacity building. Despite the provisions, the real challenge lay in scaling TDP. Hence, ELP is continuing with workshops, exposure visits and interactions with TEIs along with the use of classroom-based video clips for developing an interactive audiovisual training package on classroom practice.

The participant teachers have responded well to the initiative because they feel empowered by being made resource persons. ELP has tried setting up a field resource centre for ELL with a demonstration site which simulates the complexities of actual learning situations. The site serves as a training unit and the exposure enables knowledge-building. "We have worked with teachers to give them a voice through their writings, and conducted ethnographic studies of classroom experiences", Ms Jayaram said.

We also believe that discussion of the issue of marginalized communities is important in teacher education. Therefore, the participants are made aware of the need to understand the needs of the contexts and the learning trajectories of the children from such backgrounds, as well as the practices that can impact or impede their learning.

Ms. Shubhra Chatterji (Vikramshila, an organization that has been working for about 30 years in the space of in-service teaching programmes for NGOs, government bodies, etc): I would like to discuss Vikramshila's work in early language learning in Jammu & Kashmir, West Bengal and Tripura. There are significant challenges while addressing the diversity in learners. For this, language mapping exercise was done in each state's distinct geographies, cultures and religions. This was followed with a dialogue with the teachers in which the UNICEF also participated.

I should like to describe two programmes conducted by Vikramshila. The first was a 21-day induction training of Madrasa teachers. The objective was to help them to develop a perspective on education. The other was the Nobo Disha (New Perspective) project in West Bengal, which was implemented in crime prone-areas and aimed at increasing school enrolment to bring down the crime rates. The context was the need to introduce children living in crime-prone areas to the world of books.

What had started as a library project became a programme for early literacy. From an initial batch of 40 teachers, the number was scaled up to 40,000. The major challenge was the language of instruction because of the linguistic diversity among learners. In some states, the language of instruction was different at various levels of schooling. To address this, a multi-lingual approach was adopted for teaching at the primary school level. Vikramshila has plans to scale their programmes even further by collaborating with other academic institutes and developing an in-service course on early language & learning for teachers from 25 states.

Ms. Uma Kogekar (Centre for Equity and Quality in Universal Education, CEQUE). CEQUE's model of in-service teacher professional development evolved from multiple field experiences. Initially, the plan was to choose the best teachers, collaborate with them and create a repository of good teaching practices and methods by documenting them. The purpose of the repository was to provide mentoring support to teachers to become a good "instructional academic" as well as to foster learning community of peers. Videos are crucial to CEQUE's TPD. I would like to share a video clip of a mathematics teacher who developed a learning activity around addition, subtraction, multiplication and division. The teacher was mentored into developing a full lesson plan and conduct the activity in her classroom. The plan is available on https://www.youtube.com/watch?v=Lbtc_FCrYfY&list=PL-4JRCWeATj-i9K-i2MayMbi6CkHGJq_Cx&index=2.

The video shows a math teacher explaining the correct sequence of applying mathematical operations (addition, subtraction, multiplication and division) when a problem requires more than one operation for solving, such as, for example, $2+4*16-3$. The video shows the teacher using the a family tree as an analogy to explain the correct sequence and then encouraging his students to apply the rules for solving the problems. The video also shows the teacher encouraging his students to explain their responses (right or wrong), reflect on them, and help each other to understand the concept. He is seen to inspire his students to reflect, increasing their confidence and allowing them take their time to answer. The teacher is also guiding them to engage in peer learning.

Ms. Kogekar (in a response to a question on 'good practices' and the significance of the video): In the CEQUE model, good practices are considered to be those that encourage children's engagement with concepts, provide them with a space to think, reflect, and encourage peer learning. I agree that some of the analogies may not be appropriate, but it needs to be stressed that videos like these are helpful in enabling teachers understand as to what kind of environment is needed to facilitate good practices. The teacher has an important role in creating such an environment. The focus must shift from an endeavour to be 'best' teacher' to becoming a 'motivated' one.

CEQUE's approach to TPD approach does not provide any kind of prescription to influence teachers' ways of teaching or tell them what to say when they are on film. This is because teacher agency is considered as central to the CEQUE model. The focus is on how to teach and not what to teach. Thus, the important question before us is, how does a topic or a set of topics adhere to a teacher's practice or their understanding of their own teaching practice?

CEQUE begins its training with a discussion on a simple topic and then progressing, through conversations with the teachers, by asking them to reflect on what they do in class—the sequence of tasks or activities that are performed and their learning objectives, assessment of learning and other outcomes. Although CEQUE's focus is on one lesson in a subject, we found that the teachers are able extrapolate from the reflections on that one lesson to using the new pedagogical ideas in their regular practice. Till now CEQUE has reached out to 350 teachers during the last 5 years and produced 152 high quality videos on practice of which 90 are on You Tube, which have generated many views.

Session 5:

Working with the System for In-service teacher development

The purpose of the fifth session was to explore the theme of in-service teacher development program from a diversity lens—of schools as well as teacher— and the systemic shortcomings that are present. The session also examined the approaches to addressing this challenge. Two speakers presented their views: Mr. C.N. Subramaniam (Subbu) from Ekalavya, who spoke about the development of material, Mr. Sasha Priyo who discussed the Bodh Shiksha Samiti, a UNICEF-assisted project.

Mr. C. N. Subramaniam: Ekalavya's teacher development program in Madhya Pradesh includes forums for teachers to facilitate discussion of their work and experiences, as well as the challenges and problems faced by them. A noteworthy aspect of the forums is that the teachers can participate in

them without the fear of being judged. They help teachers to enrich their understanding and become sensitive to emerging issues.

Here, I would like to build on Prof. Dhankar's argument. There is the need to develop both conceptual (rational) autonomy and autonomy for action. However, that does not mean autonomy in an anarchist sense. It is the sense of "deficiency" which makes a system go into an overactive mode, which INSET tries to address. This view applies to the work of many NGOs also.

Addressing diversity in the system also means looking at the diversity that exists in teachers as well as schools in India. The schools can be broadly classified into government schools, private schools and voluntary schools/tuitions. Finally, the diversity of learners, including first generation learners who mostly attend government schools, must also be considered. However, one shortcoming in INSET is that teachers do not get the inputs needed to bring students to school and retain them. Feminization of the teaching staff is another issue that is faced in teacher training programs. Even among private schools, there is a clear stratification among schools like low fee private schools and the high end private schools. This also points to diversity in the teaching profession with respect to the teachers working in these schools.

One way of addressing these issues is by restoring the identity and dignity of teachers. This is important. There should be forums in which teachers of all categories could come together and discuss without fear or inhibition their work, what they are doing and the challenges they are facing. Therefore, to create a space for students' voices, there must first be a space for teachers' voices in the in-service teacher development programmes.

Mr. Sasha Priyo: Allow me to share insights from the in-service interventions of the UNICEF-Bodh project. We know that teacher workshops are the weakest link in the education value chain instead of the strongest one as they should be. But first let us quickly understand the prevalent models of teacher education. The first is the banking model in which the teacher is seen as both the implementer and transmitter. The focus is on teaching techniques and content. The second model is a reflective and constructive one with its pivots being autonomy, rigor and purposefulness. As expected, discourse on this model is ongoing.

It is important to understand the social, political and cultural discourses which affect the position of the teacher if we are to reform teacher education. One needs to understand the context in which the teacher is situated, his/her aspirations and the qualitative changes that need to be made in the training models of the post-DPEP era. It is also essential to understand who the stakeholders in the process are and where the demand for teacher education is coming from. While scaling teacher education programmes, one needs to develop the capacity of the teachers to act as teacher educators.

Session 6:

Continuous Professional Development Models for in-service Professional Development

Prof. Amina Charania presented on 'Model of Continuous Professional Development: The Route to certification—What works and What doesn't in Blended Learning'. She began with a brief review of research literature on teachers' perceptions and attitudes towards continuous professional development (CPD) and the challenges faced in the current models of professional development.

Prof. Charania: These models, which are designed and administered in a top-down manner, are disconnected from each other and are almost completely in the form of face-to-face sessions and workshops. In the context of these challenges in teacher education, TISS's Reflective Teaching with ICT (RTICT) model is of particular relevance. This model, consisted of blended courses amounting to 17 credits, are offered. The courses include a face-to-face component, a distance mode comprising online synchronous or offline material, and participation in communities of practice using apps like Telegram and sometimes, WhatsApp. The rationale for the blended approach is to sustain quality of the teacher professional development (TPD) programmes and enabling their upscaling at the

same time.

The key objectives of offering the certificate course are

- To provide a formal credential and acknowledgement of teachers' engagement by using different modes of learning,
- To engage teachers in continuous and rigorous practice, and build knowledge in pedagogy, concepts and technology integration practices,
- To sustain quality and scale in the TPD processes.

For achieving these objectives, the programme approach is marked by a shift away from a workshop one towards Continuous Professional Development by using ICT in meaningful ways to engage teachers in distant and flexible modes, share classroom practices promoting a cluster-based approach for training by developing local leadership for both sustainability and scale, building CoP groups of teachers and leveraging the potential of ICT meaningfully (for example, encouraging the BYOD-Bring Your Own Device-culture).

However, this approach presented both opportunities and challenges. What worked in the program was the continuous engagement, which was established over time, with the same cohorts of teachers using CoP through the tech-based platform and Telegram app. But despite the reading material being posted on the groups and read by the participants, it must be mentioned that 100% participation was not achieved. Overall, though, CoPs were formed and access to good reading was made possible. The prospect of certification was a motivation for many of the teachers, and the platforms offered the benefits of open and flexible learning and teaching, which was a welcome departure from the rigid 9 to 4 routine that would have deterred many teachers from participating.

What did not work well was “Lab readiness” for practice in the sense of working computers with servers and peripherals in adequate number and the transition that the teachers had made from the conventional F2F approach to remote access to technology platforms. The teachers found this to be a big challenge for which the local teacher leader-mentorship was unprepared. Moreover, the course's difficulty level and estimates of time were experimental because no benchmarks existed. Some modifications were made after a rigorous review. These included limiting the number of CoPs, introducing an orientation session for the teachers before they start the course, breaking the program into separate courses and allowing certification for each course after its completion by the teacher. In addition, the language was also simplified to improve communications and making assignments easier for the teachers to understand and solve.

Dr. Ruchi Kumar explained the structure of a blended course on “Reflective Mathematics Teaching”, a 4-credit course, which is part of the RTICT programme. The course emphasises on practice-based professional development by requiring teachers to go through an ICT-based module, first as a learner and then implementing it in the classroom as a teacher after which they have to share reflections with peers over mobile chat.

Dr Ruchi Kumar: The first unit (of the course) makes a teacher work deeply with a particular topic, building on their experience of implementation for reflecting on the larger issues and ideas in mathematics education, such as mathematics anxiety, growth mindset, assessment and analysis of student thinking and learning, resources like math labs and understanding the mathematical processes in greater depth. To explain this point further, I would like to show you a few examples of CoP posts by teachers in which they shared photos with description of implementation, as well as ideas and issues that arose during practice and solutions to mathematics problems posed in the group.

Mr. Nilesh Nimkar made a presentation on ‘The Role of Technology in Teacher Development: Some Insights from Maharashtra’. He began with a question for the audience about the imagined role of technology in the professional development of teachers: Was it one of replacement or an enabler?

Mr. Nilesh Nimkar: In this context, let me share my concerns over a GR issued by the Department of School Education which advocated a ‘training-on-demand’ approach. I call it the cafeteria approach

because it assumed an awareness of possibilities without acknowledging the concerns regarding availability, who will arrange these trainings and how the demands will be shaped. There are Dual Mode courses offered by Maharashtra Academic Authority (MAA) for teacher-educators and teachers, and by MSCERT to Subject Experts in DIECPD in collaboration with QUEST & UNICEF. Long-term courses are offered in Pedagogy of Mathematics (32 weeks) and Language development and literacy pedagogy (32 weeks). Some short-term courses, such as ‘number concepts and addition-subtraction’, ‘multiplication and division’, ‘fractions and rational numbers’, etc. of 12-week duration are also offered. Another short-term course, ‘Foundations of Maths Pedagogy’, is of 4 weeks’ duration.

Session 7:

Open discussion 1- Working ‘with’ teachers

The discussions on this session revolved around the questions:

1. “What does it mean to work ‘with’ teachers? and
2. “What does in-service teacher development do to teachers (teacher knowledge, teacher mobilization, agency, voices, teacher motivation)?”

The session was moderated by Mr. Ajay Singh and Ms. Devika Sharma. Several issues and concerns emerged which are summarized here:

1. *On the State of facilities at in-service trainings:*

Prof. Dhankar: Historically, the state of amenities and infrastructure in schools—water, toilet, food and stay facilities—has been poor and has had an impact on how teachers feel about training.

Mr. Subramaniam: The dignity of the teacher must be respected. At the minimum, proper facilities must be provided. Both trainers and the teachers must be treated equally. There is also the need to acknowledge that today, trainers have power and even when one tries to engage teachers in a conversation at the workshops, the teachers’ response may be mechanical because they feel intimidated or that they are being judged. Therefore, training can start with a discussion on something that the teachers are already doing well, such as a science topic or experiment, before taking up a new topic. Or, the trainer can make the teachers aware of the resources that they can access.

It is also important that trainers are open to discussion and negotiations about what their reality is. They must be willing to accommodate the teachers’ viewpoints rather than going into workshops with a preconceived notion of reality.

Dr. Vinod: There is no dignity without conformity and the internal hierarchy present among the resource person and the network of inter-institute relationship is built on them, which need to be critically analysed.

2. *Objective of in-service workshops:*

Prof. Dhankar: In-service training leads to change in the discourse on teachers, which is good if it is not just restricted to adoption of jargon and terminologies discussed in training, as it can sow the seeds of change.

Mr Subramaniam: There are two ways in which in-service teacher education workshops can be conducted. One way, which is the age-old one, is to focus on the transformative agenda and make the teachers learn the prescribed activities and implement them in the classroom. The other is to make teachers reflect on their teaching. Reflection may not lead to a conclusion; but giving the teachers an opportunity to creatively engage and think about how students learn and providing continued engagement for reflection on practice—through peer interactions or giving them access to books.

Mr. Sasha: I agree with Mr Subramaniam. Workshops that are designed on a reform agenda convey the implicit message to teachers that what they are doing is not good, which highlights the politics in in-service teacher education. Teachers need to understand the need for reform by negotiating with the idea of what reform is, and whether the reform is possible or the idea is just a vision. Even if we can see the need to address the differences in the contexts of the teachers, the government may interpret it as an anarchist view.

Prof Padma: There is a need to develop teachers' beliefs, knowledge and arguments.

Mr. Sasha: I believe teachers should own the reforms and be allowed to evolve their belief systems instead of being told what they must believe. When such a negotiated belief system is created, the walls will become porous and that is where the teacher's dignity might be restored.

AUD student: Instead of looking at only academic needs, one also needs to acknowledge that every teacher holds a set of beliefs that he/she cherishes most which must be built on for his/her professional development. Thus, even a teacher who has not taught fractions properly but can discuss problems with his/her students and help them in their progress must be regarded as a good teacher. The responsibility of making the walls porous lies within the teacher education institutes.

3. *Development of a professional Community:*

Prof. Padma Sarangapani: It is necessary to facilitate access to a professional community which includes not only teachers, but also people working in the area of education and even teacher educators. Access to such a community helps in being connected to the larger purpose of teaching. In the area of in-service teacher education, this community can work on developing a collaborative space for thinking and planning, in which pedagogical plans can be discussed freely, even if there is the possibility of deviation during their implementation.

Mr. Subramaniam: In this regard, we want to invite teachers to be part of our community, but they have an intense sense of belonging to their own [community]. Being trainers, we cannot be a part of theirs.

At this point, one student remarked that there could be an adversarial situation if communities are viewed as "ours" or "theirs". Today, the teacher's work is seen in isolation without regard to the teaching environment in which he/she faces distrust and hostility on an almost daily basis. Such an environment is not conducive to making the effort at teaching reflectively. Another student expressed the view that one needs to examine if the teacher's beliefs are suited to the culture in which he/she may be working.

4. *Nature and mode of in-service teacher training:*

Prof. Dhankar: Teachers need to be convinced about "why they are doing what they are doing" so that they can apply their workshop learning in the classroom. This conviction may come from wrong beliefs held by teachers but may be perceived as over-emphasis on the mind of the teacher and one may need to analyse the socio-political aspects of the space in which teachers work.

(On this point, many participants, including Prof Dhankar, Prof Padma Sarangapani and Prof Ruchi Kumar, felt that space should be provided in workshops for giving teachers various experiences with alternative classroom environments, which may not be possible by just developing their pedagogical imagination).

Prof. Padma Sarangapani: Metaphors, such as the one used by Ms. Keerthi in her work, are extremely useful. They help to make ideas accessible to teachers in various forms and modes with which they can engage while teaching.

5. *Need for continuous professional development*

Ms Amarjyoti: A colleague and I attended back-to-back trainings without getting the opportunity (and the time) to implement what we learnt. In fact, we sometimes felt that teaching has become a secondary function for us.

Prof. Dhankar (On the need to provide on-site support to teachers post-training): Somebody needs to be there to share the risk of doing something different in the classroom, and to discussing the experience with. Although it might be difficult to scale up strategies for on-site support, it is worthwhile to engage with teachers at classroom level after the trainings to provide opportunities for continuous teacher professional development rather than one-shot workshops.

Agreeing with Prof. Dhankar's view, Ajay said that one needs to move away from the workshop mode to working with teachers in a way that they teachers participate in the designing of their own professional development.

Open Discussion 2—Working with the Government and School Systems

This session was moderated by Prof. Rohit Dhankar and Monimalika Day. The session began with Monimalika Day inviting members of the conference to share their experiences in the context of teachers working with government and school systems. The aim was to discuss what teachers tried, what worked in their classrooms and what did not.

Several issues emerged and insights gained from the discussion, which are mentioned in brief below:

1. *A Need for Practitioners from Different Disciplines to Interact with the Field of education:* Vani expressed her opinion that the answers to the problems of education can be informed if there is deeper engagement with various disciplines.

2. *The problem of Inadequate teacher preparation:*

Preeti (a student): There is a gap between theoretical ideas taught in teacher education programmes and the challenges faced by the teachers when they try to innovate in schools. Many teacher educators do not have the experience of working in schools and hence, have poor understanding of the contexts. Ground issues, such as high teacher student ratio, and classroom management, are not adequately discussed with the aim of prepare teachers for classroom practice.

Prof. Sunita Singh: I have videos from actual classroom settings which show pre-service teachers failing to engage with students because of the noise. Obviously, I cannot use them in my training courses. Hence, I have to take recourse to using sanitized videos to explain pedagogical ideas to my trainees. Preparing [the trainee teachers] to face the challenges of practice has significant effect on the teachers' self-efficacy and it is for this reason that pre-service teacher education should be connected organically to schools and the community.

3. *Making theoretical ideas accessible to teachers:*

Dr. Ruchi Kumar: There are ways of making theoretical ideas accessible to teachers in workshops. One can do a role play by simulating a classroom situation after which the teachers can be asked to analyse what their students are thinking. This could help teachers to differentiate between the quality and level of their students' thinking and examine the various ways of addressing the issues that are identified. Another possibility would be using a live teaching environment which involves students and then having a critical discussion on the pedagogy used. Such an approach could facilitate the teachers' reflection on their practice and not just implement methods that they have told to use.

4. *Developing supportive structures within the system:*

Prof. Shivani Nag: Teachers struggle to innovate while teaching. There is an urgent need to develop supportive structures which can scaffold conversations and thereby, facilitate the articulation of tensions and negotiations between traditional and progressive pedagogies.

Mr. Prahalad Kathole (in agreement with Ms Nag): Teachers' agency and autonomy are essential to INSET for making teachers aware of the recommendations of NCF. There is also another issue: the practice of transfers over which the teachers have no control. I strongly believe that policy on transfers needs to be informed by the concerns of the teachers.

Mr Subramaniam (referring to the issue of transfers): I think there should be a community support forum where teachers can discuss their challenges. But at the same time, the absence of such a support system must not have an impact on classroom processes.

Prof. Padma: We could have credit based in-service courses to make in-service training meaningful and valuable, as well as create career pathways for the teachers.

Prof. Dhankar: The idea of certification courses is a good one, but I fear that it could lead to private agencies entering the system and displacing the more qualified and established persons and institutions working in this area.

5. *Negotiating with the government:*

Prof. Ajay Singh (on how negotiations on the financial aspects can be carried out with the government officials): It is necessary to understand the working of the system and to capitalize on tensions within the government, such as the time when it has to present the outcomes of standing committee reports.

Prof. Dhankar: Decisions are made at district level by a committee. Once taken, it cannot be changed at the whim or desire of one individual. The system highly resistant to change.

Mr Subramaniam: We must also examine how the system and structures evolved over the years. We are frequently told to work within the system but often fail to take into account factors that influence the government, such as public perception. Even limited-scope comparative studies on the number of periods devoted to teaching an important topic can create pressure on the state's system.

Mr Nilesh: Even when a consultant is hired for engaging with the system for any work, there is an impact because the department's work becomes product oriented. Although they may not have in-depth knowledge of education, department personnel have decision-making powers.

Uma Kogekar (highlighting the issues faced by NGOs working in the teacher education space): When they [the NGOs] engage with state systems on matters related to the challenge of at-scale implementation and measuring learning outcomes of participating teachers and students, the constraint is that we have to work within a meagre budget. Prof. Padma mentioned that although in-service teacher education has not been regulated till now, several organisations are showing interest in this area.

6. *The Nature of In-service training:*

Mr Ajay Singh was critical of the workshop mode of in-service training where teachers are engaged with lectures for a fixed time and away from classrooms. Instead, he suggested that teachers can design their own in-service programmes based on their work, discussions and sharing experiences from their practices in the classroom.

Mr Subramaniam (agreeing with Ajay's idea of allowing in-service teachers to develop their own training curriculum by sharing experiences and challenges): The teachers would value

such an approach and take ownership for the outcomes. I also suggest that academic members should co-author articles and papers with teachers for improving the latter's capacities.

Prof. Monimalika: If we cannot provide a supportive structure to the teacher, we should not expect results from them. Hence the focus of teacher education must be on discussing the challenges in classrooms rather than the identities of the people involved.

Prof. Rohit Dhankar: Let us also accept that there are no best or worst methods. What is of crucial importance is the mode of working and how we engage with ideas and the human mind. For example, some people can engage human minds with ICT, a few through workshops and others through classroom, etc. Psychologizing of the curriculum also needs to be done for the teacher.

Concluding Session

In the concluding session Prof. Padma Sarangapani and Prof. Manish articulated the goals and activities for the consortium and invited the participants to share their thoughts and ideas about how to build the consortium and take it forward.

Prof. Manish: The AUD team's engagements with various people and organization working in the area of in-service teacher education has been fruitful. We were able to discuss the principles, modalities and possibilities, as well as the challenges, of working with the Delhi government.

Prof. Ajay: Participants should find ways of working together, which will give the consortium meaning and stability and help it in its efforts at developing courses and certification. The consortium is our best available option.

Several participants shared the demands and the challenges faced by them while working with the government. They wanted the government to expedite decisions and actions that it is responsible for. Initiatives and programmes must be scaled up quickly. e-Content must be made available which will make inter-institution collaborations and working with individuals easier.

Another area where the participants from NGOs (Mr. Nilesh Nimkar, Mr Sasha Priyo and others) felt the need for collaboration with universities was for rigorous and systematic data analysis and knowledge-generation and sharing of experiences. Joint research, conceptualised by university academicians and conducted in partnership with practitioners or teachers, was also a felt need in the Indian context. Even while the demand for scale is being met, there is a need for research so that the learning can be used to develop guidelines for in-service teacher education, enrich teacher capacity building and identifying the negotiables and non-negotiables.

Uma Kogekar: There is a need for university experts to evaluate [programmes and material] and provide feedback. It is also necessary to work together for designing certification courses. This will add prestige to in-service teacher education. There are many teachers in rural and remote areas who are not familiar with the work being done in the universities and the identity of the researchers. With extensive collaboration, the gap between remote schools and teachers, and the universities can be narrowed significantly.

Prof. Ritesh Khunyakari: I have observed that universities are also going through a good amount of struggle. But they must bring in new perspectives and find new ways of doing things to develop valuable open common resources, using inputs from resources persons in different areas. These resources should be useful to teachers and can be disseminated through digital platforms or libraries, or even by locating them in the schools. They can also be translated in regional languages after including teachers' viewpoints. Another way to invigorate in-service teacher education is to have symposia of teachers at different universities, institutionalize fellowships for teachers so that they can get some time to reflect on practice and consolidate it.

Prof. Farida Khan: It is a good idea—having a library for resources. In fact, I can share experiences

in which teachers have responded enthusiastically to be provided teacher fellowships which enabled them to access and explore resources and engage in action research on the problems they faced in their classroom.

Another participant shared her experience of working with teachers in the US who were doing their Masters programme. One of the course requirements was participation in action research in a school involving a team of three or four teachers of that school. This not only ensured commitment from the system, but also the chances of changes in school practices.

Mr Subramaniam: Eklavya has done a significant amount of work with two courses for generating open-source material for teachers and students with two courses. One course is on childhood and the other is on school and society. We have also conducted several workshops for parents, children and teachers, and even a “Theatre of the Oppressed”. There is also a plan to set up spaces for teachers to access these resources voluntarily.

Prof. Rohit Dhankar: Teachers should be offered options on how they wanted to be trained. They can be given a choice between a 20-day mandatory in-service training that they must attend every year or do these courses from a university. Digantar has three programmes—one is for transcreating (instead of translating) material because it makes better sense to teachers in the Indian context; another is a blended course on the foundations of education which is conducted in the distance learning and face-to-face teaching modes; and the third programme involves working with states for teacher training. Discussions with the government is largely facilitated by a third party.

Dr. Ruchi: One way forward is to study these diverse models and see where they can converge and, as well as where they differ. The findings of this study—and the experiences of working with the various models—can be used for working with teachers. I think that this would be a worthwhile exercise because there are few published studies on the way in-service teacher education is done. Further analyses can help in the development of a deeper understanding of in-service teacher education in the Indian context, such as the ways of dealing with the content, subject matter, pedagogies, how various organisations are working towards developing communities of teachers, and the different types of resources that they are using (ICT, hands-on or others) for working with teachers.

One of the participants pointed to the lack of attention in in-service education to teaching children with disabilities, and that the discussions in the roundtable did not address this gap. In fact, this need was only recently addressed in pre-service education. The participant expressed her view that it is essential to understand the challenges that teachers face while working with such children, and the learning outcomes they achieve.

Dr. Vinod: Teachers in state universities undergo a lot of struggle, both in their practice and with the system. But what can be learnt from successes and failures [in these struggles] is that the idea of dignity and equality are just a philosophy. What matters is that the person who makes the money [and resources] available has the major say on what experiences [of the teachers] must be acknowledged and shared.

Prof. Monimalika: The ideas shared in the last two days of the roundtable can be used for developing a framework for approaching in-service teacher education in India, so that we begin to explore these ideas and bring them together.

Prof. Ajay agreed with her, suggesting that a platform like Edx can be used offer diverse courses from various organisations. Prof. Amina Charania appreciated the openness of the discussions and suggested that the group should meet again in five or six months. It should remain connected in one way or another.

Prof. Padma: I would like to see the experiences, ideas and reflections which were shared in the last two days being consolidated. From this base we must develop a scheme of what is desirable in in-service teacher education, and how we can do it. At the very least, what we have shared will pro-

vide us with a broad value framework which we can become a reference point for taking the dialogue forward. Considering the diversity of thought that we have seen in the collaborations, critical feedback we have received, and participants' engagement with ideas, it is highly likely that more such roundtables would be needed to refine them. We must also consider establishing formal linkages between institutions interested in taking the activities of the consortium forward.

Prof. Manish: Although AUD is not yet directly engaged with in-service teacher education, the organisation is in the process of preparing a concept note with which it can formally engage with the Delhi government. We have learnt that in-service training is not just about teacher-educators teaching school teachers, but also about going to the schools themselves to learn a lot about teaching.

INSIGHTS FROM THE ROUNDTABLE ON IN-SERVICE TEACHER EDUCATION

3

The broader objective of the roundtable was to develop insights into the different models of teacher education that are at play; identify the diverse perspectives and constructs used to analyse them and design teacher professional development; and understanding the issues and challenges faced at ground-level for working towards a consortium by leveraging the synergies of different organisations and individuals involved in teacher education. The discussions at the roundtable—and while this report was being prepared—have added to our understanding of in-service teacher education, particularly about what has been tried in in-service teacher education, what has worked and what has not, as well as what is worth trying.

Work in in-service teacher education requires engaging with the system. It needs to be understood and accepted that ‘system’ is not limited to government officials; it also includes the teachers who are working in government schools, civil society organisations, educational institutions and NGOs working with government schools. Moreover, there is a need to consider private institutions and the teachers working in them because these institutions are part of the system and it must be ensured that their teachers also have access to in-service teacher-education opportunities. Therefore, it is necessary to include the voices of all stakeholders—including the teachers and civil society organizations—from the public as well as the private sector in the development of a framework for in-service teacher education.

Teacher autonomy and agency, development of teacher knowledge and beliefs, connecting teacher professional development to teachers’ classroom practices, and developing communities of teachers and educators are some of the major constructs that guide the design as well as analyses of the impact of teacher education. Although there were variations in the interpretation and elaboration of these constructs, it is important to be able to provide empirical evidences and examples of these constructs from the field. The extent of emphasis given to these constructs by the participants is an important indicator of their professional development and this can be used to develop a standard framework for designing and evaluating in-service professional development efforts. The development of such a framework will further the development of a coherent vision for in-service teacher education, as well as develop insights about the different ways in which these constructs are explicitly or implicitly exhibited in various contexts.

Several organisations expressed their interest in doing collaborative research with educational organisations to better elucidate these constructs and identifying empirical evidences of teacher learning through the professional development efforts.

The participants in the roundtable used a variety of models in their work with teacher education. Most of the them recognised the need for continuous in-service teacher education and limited the process to only workshops. The models of continuous in-service teacher education adopted by the organisations included the element of follow-up with the help of face-to face meetings inside the classrooms or outside, through mobile-based chat groups or online courses. The objective of follow-up was to work with the teachers and influence their practice by providing them continuing support.

However, it was also observed at the roundtable that there is lack of evidence on how teacher professional development efforts have impacted classroom teaching or even whether and why teachers felt that in-service training was relevant. Therefore, there is a need to assess whether in-service professional development should be general in nature or cater mostly to important and difficult topics for making it more relevant for teachers.

There is also the need to understand how technology is being harnessed to strengthen teacher motivation and engagement in in-service teacher education—through online or blended modes—and

to what extent access to technology and knowledge about its use constrains or affects teachers' professional development. It is also important to know the challenges to using technology-based resources in the field as well as in sustaining the distance mode of learning for going beyond the face-to-face one.

The offering of in-service teacher education through 'courses' is a move towards its formalisation. This might push the system—and society—to take in-service teacher education more seriously as an acceptable way for the career advancement of teachers.

The participants at the roundtable talked about the innovative and practice-based activities with which they engaged the teachers in the in-service workshops. The practice-based activities included lesson planning, role plays, demo classrooms focusing on the 'practice' of teaching for reflection, making beliefs explicit and developing their metacognition. The resources used for these activities included videos of the teacher educators, as well those from classrooms. However, it is not yet clear as to what teachers interpret from these videos of teaching practice and the resources based on them, and what ideas from the videos are used in their classrooms.

In the discussions of theoretical ideas at the workshops, it was agreed by the participants that the use of appropriate metaphors, such as Keerti Jayaram's 'hand', shows much promise for their applications in classrooms. Additionally, the need was also felt for developing the pedagogical imagination of teachers by making them reflect on alternative practices that they can adopt in their classrooms.

One aspect in which the TPD interventions, which were discussed at roundtable, differed from one another was the scale of their implementation and the approach to scaling. Several interventions followed the cascade model—in which the 'designer' of the training trains a cadre of teacher-educators for training the teachers—for scaling teacher education efforts. The teacher educators are usually selected from state institutions. However, the problem with this model is that, often, trainers do not get enough training experience to fulfil the role of teacher educators meaningfully because they themselves have not tried the practices or used resources which they recommend to teachers.

To address this constraint, CLIX has adopted the "Nested model" in its interventions, where teachers are supported by the faculty in the initial year during which they gain experience in classroom practice and use of teaching-learning resources. This helps them to improve their confidence and knowledge as teacher-educators in later years.

Sasha Priyo described another model where the capacity of teachers is developed locally as "ripples" which in combination contribute towards professional development. Keerti Jayaram, Uma Kogekar and Nilesh Nimkar talked about using a mentoring approach for bringing about change in the classroom practices of teachers, and for preparing teacher educators. However, there was agreement among the participants that there has been little research and documentation which shows how mentoring works.

Scaling is a challenge to address which, government support-administrative, as well for ensuring availability of resources on a large scale is crucial. The major challenge, however, is negotiating the curriculum goals set by the state because they may not clearly align with the prescribed syllabus. Another challenge to scaling was the diversity present in the ecosystem, not only amongst students and teachers, but also in the types of schools. For organisations that use technology to scale their programs, availability of infrastructure, its access and ease of use significantly constrained their efforts at scaling. But on the other hand, technology facilitates the connection of a large numbers of educators, schools, teachers and students in a short time.

There is also recognition of the social nature of teacher learning and the role that communities play in teachers' professional development. In this regard, Mr. Nimkar and Prof. Amina spoke about the development of communities through mobile-based apps and their sustainability. These communities included teacher educators and indicated the need for supporting the teachers by expanding them to

include other stakeholders in in-service teacher education. However, this is likely to present multiple challenges due to the existing power relations between the teachers and the teacher educators.

What has not been tried yet in the in-service teacher education space are teacher symposia and formal support for action research by teachers. Teachers are offered a choice—or voice—in identifying their professional development needs and experiences. Prof. Dhankar suggested the development of various types of professional development opportunities based on the felt needs of the teachers. However, the present set up in in-service teacher education space does not recognize teachers as professionals and that they have a wide range of professional development needs. The situation requires organisations providing in-service professional development to come under one umbrella, or form a consortium, for providing teachers access to diverse modes of professional development.

The roundtable also suggested that policy makers should focus on three key areas of in-service teacher professional development. Firstly, there is a need to bring the different organisations, who are involved in in-service teacher education, under the umbrella of a consortium for the formalisation of in-service education. Short- or long-term courses can be provided to the teachers, the choice of course depending on the teachers' needs. Secondly, a common framework needs to be developed for working in in-service teacher education, which is based on certain crucial constructs like teachers' beliefs, knowledge, practice and identity. Thirdly, there is need to study research-based evidence of how teachers learn during in-service teacher education and the influence it has on teachers' classroom practices and student learning outcomes.

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ANNEXURE

Annexure 1

Ambedkar University, Delhi

Tata Institute of Social Science, Mumbai

in-service Teacher Development: Perspectives and Possibilities
27-28 April 2018

School of Education Studies,
Ambedkar University Delhi, Lodhi Road Campus, Delhi

Schedule for the Roundtable

Day 1: 27 April 2018

Date and Time	Topic/Activity	Speaker(s)	Anchor for the discussion
9.30 - 10.00 am	Introductions and Welcome	Sunita Singh	
10.00 - 10.20 am	The Context of In-service Teacher Development and Agenda for the Roundtable	Padma Sarangapani	
10:20 - 11:30 am	Experiences of being and becoming a teacher: Role of in-service teacher development programmes	Teachers from TISS-RTICT (Amarjyoti Sinha, Natwar Singh, Pralhad Kathole, Delhi Govt school teacher)	Ruchi Kumar & Prabhat Rai
11:30 - 11.45 am	Tea time		
11:45 - 1:15 pm	Teacher Knowledge and Teacher Agency in the Context of In-service Teacher Development. Teacher Knowledge: Some Evidence from Data and Practice	Rohit Dhankar Nilesh Nimkar Ruchi Kumar	Padma Sarangapani
1:15 - 2:00pm	Lunch		

2:00 - 3:30pm	Models and Practices of in-service Teacher Development Classroom Practices and In-service Teacher Development: Insights from OELP Experiences Capacity Building of Teachers in Early Literacy and Library program CEQUE Model of In-service Teacher Professional Development	Keerti Jayaram Shubhra Chatterji Uma Kogekar	Sunita Singh
3:30 - 3:45pm	Tea		
3:45 - 4:45pm	Working with the System: in-service Teacher Development In-service Teacher Development: Developing Material In-service interventions: Contexts and Insights	C N Subramaniam Sasha Priyo	Gunjan Sharma
4:45 - 5:15 pm	Insights from the Day's Proceedings and Open Discussion.		

Day 2: 28 April 2018

Date and Time	Topic/Activity	Speaker	Anchor for the discussion
9.30 - 9.45 am	Discussion of the Agenda for the Day		
9:45 - 10:30 am	Model of Continuous Professional Development—the Route of certification— What works and what doesn't in Blended Learning	Amina Charania	Shivani Nag
10:30 -11.30 am	Open discussion 1 What Does it Mean to Work 'with' Teachers? What Does In-service Teacher Development do to Teachers (Teacher Knowledge, Teacher Mobilization, Agency, Voices, Teacher motivation)?	Moderators: Ajay Singh and Devika Sharma	
11.30 - 11:45 am	Tea Break		
11:45 - 1:00 pm	Open Discussion 2 Working with Government and School Systems	Moderators: Rohit Dhankar and Monimalika Day	
1.00 - 2.00pm	Lunch		
2.00 - 4:00 pm	Going Forward—Goals of the Consortium and Immediate Actions	Padma Sarangapani and Manish Jain	

ANNEXURE II

List of participants

1. Ajay Kumar Singh,
*Tata Institute of Social Sciences,
Mumbai*
2. Akha K. Mao
3. Amarjyoti Sinha,
*Teacher in GHSS (CLIX schools),
Bagtarai, Dhamtari, Chattisgarh*
4. Amina Charania,
*Tata Institute of Social Sciences,
Mumbai*
5. Bobby Abrol
6. C. N. Subramaniam
7. Devika Sharma
8. Dhvani Bafna
9. Gunjan Sharma
10. Jayshree Mathur
11. Keerti Jayaram
12. Kishore Darak
13. Madhulika
14. Manasi Thapliyal
15. Manish Jain
16. Monimalika Dey
17. Natwar Singh
18. Nilesh Nimkar
19. Nivedita Sarkar
20. Padma Sarangapani
21. Prabhat Rai
22. Prahlad Kathole
23. Rajshree Chanchal
24. Ritesh Khunyakari
25. Rohit Dhankar
26. Ruchi S. Kumar
27. Sasha Priyo
28. Sheetal Nagpal
29. Shivani Nag
30. Shubhra Chatterji
31. Sonia Sawhney
32. Sunita Singh
33. Uma Kogekar
34. Vinod R
35. Seema Das
36. Chavvi Katyal
37. Paulami Mazumdar
38. Mimansa Gupta
39. Himani Gour
40. Natwar Lal
41. Priya Yadav
42. Megha
43. Gaurav Sharma



