



Working Paper No. 6

Research Area: Education

Role of Voluntary Teacher Forums (VTFs) in Continuous Teacher Professional Development in India: Experiences from Rajasthan, Karnataka and Puducherry

**Aarif Hussain, Amit Kumar Sharma,
Gandhimathy K., Gladson M. E.,
Vargheese K. A., Vinod Jain, Yogesh G. R.**

May 2017

Azim Premji University

Aarif Hussain, Amit Kumar Sharma, Gandhimathy K., Gladson M. E.,
Vargheese K. A., Vinod Jain, Yogesh G. R. (2017). *Role of Voluntary Teacher
Forums (VTFs) in Continuous Teacher Professional Development in India:
Experiences from Rajasthan, Karnataka and Puducherry.*
Azim Premji University (Working Paper No. 6).

© 2017 Azim Premji University.

This publication may be reproduced by any method without fee for
teaching or nonprofit purposes, but not for resale. For copying in any other
circumstances, or for re-use in other publications, or for translation or
adaptation, prior written permission must be obtained from the publisher.

Available from:

Azim Premji University
PES Campus
Pixel Park, B Block
Electronics City, Hosur Road (Beside NICE Road)
Bengaluru – 560100, India.

About the Working Paper Series

The working paper series aims at reflecting the range of work done across the Azim Premji Foundation, including the Field Institutes and the University, and disseminating this work to a broader audience. University faculty, members of Field Institutes of the Foundation as well as students graduating from the University may contribute to the series.

The findings, interpretations and conclusions expressed in these papers are entirely those of the authors and do not necessarily represent the views of Azim Premji University.

For all enquiries and feedback, please contact: wps@apu.edu.in

Role of Voluntary Teacher Forums (VTFs) in Continuous Teacher Professional Development in India: Experiences from Rajasthan, Karnataka and Puducherry

Aarif Hussain | Amit Kumar Sharma | Gandhimathy K. | Gladson M. E. |
Vargheese K. A. | Vinod Jain | Yogesh G. R.*



Abstract: *The quality of education depends largely upon the teacher. Hence building teacher capacity through continuous professional development of teachers is critical to the quality of education. Systems and programs for continuous professional development for school teachers in the formal educational system in India are inadequate and often ill-conceived. Apart from other lacunae, they often do not recognize the professional identity and agency of the teacher. Voluntary Teacher Forums (VTFs) that are facilitated by Azim Premji Foundation in different locations of India, as part of an integrated and multi-modal approach to continuous professional development, try to address this central issue. This study shows that VTFs are evolving as very useful platforms for collaboration and peer learning amongst teachers in various locations. It shows that given an environment that allows for easy access to meaningful opportunities, teachers will commit their time, talents and resources to their own professional development. The study further recognizes however, that the real issue is to understand **how such forums can be made to happen** in different locations in a context as complex as the Indian public education system. While this study highlights certain crucial dimensions of the VTFs – including what happens within these forums and the efforts that go behind it – these continue to be subjects for our future research works.*

Keywords: *Voluntary Teacher Forum, Teacher Professional Development, In-Service Teacher Education, Professional Learning Communities*

* Names of authors are listed alphabetically. The authors gratefully acknowledge the contribution of Mr. Anish Madhavan, for his critical inputs in refining and developing the paper into its present form.

Role of Voluntary Teacher Forums (VTFs) in Continuous Teacher Professional Development in India: Experiences from Rajasthan, Karnataka and Puducherry

Aarif Hussain | Amit Kumar Sharma | Gandhimathy K. | Gladson M. E. | Vargheese K. A. | Vinod Jain | Yogesh G. R.

1. Background

Azim Premji Foundation (Foundation) has been working with the government schooling system of various Indian states for more than 15 years, to improve quality and equity in education. The Foundation's strategy has evolved over a period of time based on the available body of knowledge and accumulated insights from its own experiences of working on the ground. Based on the belief that educational change is a long-term process needing continuous efforts, the Foundation works in 45 districts across different states of India.

The Foundation believes in the centrality of the teacher in any meaningful effort to improve quality and equity in education. Therefore building teacher capacity through continuous professional development is at the centre of its efforts on the ground. Voluntary Teacher Forums (VTFs) that the Foundation facilitates across its locations are an integral part of its multi-modal and integrated approach to continuous teacher professional development.

This working paper is part of a larger enquiry that will try to understand what VTFs are, what their role in the professional development of teachers is and how they are made to happen. The question of how they are made to happen is complex; though some preliminary explorations are part of this study, it will be the subject of further studies that are planned as part of this larger effort.

For such an enquiry, it is necessary to situate VTFs in their proper context, including the broader context of teachers and continuous teacher professional development in the country's public education system and the specific context of Foundation's approach to the same on the ground.

1.1 Teacher Capacity in India

It is well accepted that quality of education is inextricably tied to the quality of teaching and hence to the capacity of teachers. It is also clear that there is a problem with teacher capacity in India.

To start with, most of the teacher preparation programmes (what is referred to as “pre-service” teacher education) in the country today build very little capability; curriculum and classroom processes are mostly out-dated and distanced from the reality of the school and the children it is supposed to serve. Most of them are inadequately designed to build the kind of knowledge, skills and dispositions that an individual needs to become a teacher.

Secondly, the teacher selection process is not streamlined or structured across the country. Apart from teacher selection processes – including teacher eligibility tests, school service commission etc. – being inadequate in evaluating a potential teacher, it is assumed that anyone who qualifies once, could forever remain a teacher without the need for any renewed certification or upgradation of knowledge. To compound the issue there are many states that appoint different cadres of teachers – including teachers on short-term contracts and guest teachers - who often do not go through the same qualifying criteria.

And finally, there is also the issue of who comes into the teaching profession in India. It is known that teaching is not amongst the “top professions of choice” in India. While this is a complex issue, it has at least partly to do with the fact that an overall culture of lack of autonomy and disempowerment and the false notion that teaching is not a challenging job has led to low social status being accorded to the profession.

While these issues need to be tackled, it is clear that if we want to improve education in the near future, the capacity of existing teachers in the system needs to improve. This puts the onus for improving education on the system of continuous teacher professional development.

1.2 Continuous Teacher Professional Development in India

In almost seven decades of independence, various strategies have been initiated for continuous teacher professional development in India. This is attested to by various education commission reports including Secondary Education Commission (1952-53), the Education Commission (1964-66) and the Chattopadhyaya Commission (1983-85). Policy documents like the National Policy on Education (1986) and flagship programmes like District Primary Education Programme (DPEP) and Sarva Shiksha Abhiyan (SSA) created institutional structures and processes for continuous teacher professional development within the public education system.

In spite of well-intentioned policies, the professional development opportunities available to teachers in the public education system are somewhat limited and face several challenges. While these include weak institutional structures due to half-hearted efforts at implementation and an acute shortage of quality teacher educators at all levels, even more fundamental challenges plague the conceptualization of teacher professional development. It stems primarily from a lack of

recognition of teaching as a profession, due to which we fail to recognize the body of knowledge and skills any teacher is expected to master. This results in a scrambling together of disparate in-service programmes each year leaving teachers feeling over-trained, and still as inadequately prepared to tackle daily challenges in their class-rooms.

Quality is negatively impacted also by a further lack of recognition of differences in professional needs of different teachers which may arise due to being at different stages of their career, or due to the different professional journeys they have traversed or even due to individual traits. Trainings are rolled out across the state and teachers often selected through ad-hoc criteria with no scope for them to pick and choose opportunities according to their individual needs. This often leads to teachers going through irrelevant training programmes year after year resulting in disinterest in and even active avoidance of professional development opportunities. In-service teacher education does not meet the requirements of practicing teachers (SSA JRM, 2015). Though on paper, training needs assessment is carried out, in practice, training is planned in a centralised manner with hardly any involvement of the teachers. For example, Ramachandran and others argue that there is hardly any training on teaching in multi-grade classroom or teaching first generation learners, which are the most common problems faced by government school teachers in our country (Ramachandran et al., 2008).

There is also an almost complete reliance on training – often one-off and random in nature – as a mode of professional development, providing almost no opportunities for teachers to learn experientially, from peers, at their own pace and enable them to draw insights for improving their own classroom practices; despite the well-established fact that this is a necessary component of effective professional development systems. Most of these trainings are also implemented in a cascade approach involving the centralized training of master trainers who then train large groups of teachers in diverse regions within states (MHRD, 2009). Such a cascade approach to training has been found to be ineffective due to the loss in transfer. This approach also sees teacher development as limited to a transferable package of knowledge to be distributed to teachers in bite sized pieces. It treats teachers as passive recipients of knowledge who do not have the ability to make their own decisions regarding their learning and their needs.

The National Curriculum Framework for Teacher Education (NCFTE, 2009), recognized the importance of these issues when it noted that programmes of in-service teacher education should “build on the principle of creating ‘spaces’ for sharing of experiences of communities of teachers among themselves, to build stronger shared professional basis of individual experiences and ideas. Giving teachers a space to develop and hear their own voices is of utmost importance” (NCFTE, 2009:66). Similarly, the Justice Verma Commission (2012), after reviewing the existing practices of in-service teacher professional development, note that ‘teachers’ contribution in professional development should come with the realization that participation in in-service education programme is in his/her own interest, as also in the interest of children, and in the overall interest of improving the quality of education,’ (Verma Commission Report, 2012, Vol. 1:24). These issues again are hence not an issue of intention, but one of implementation.

1.3 Foundation's Approach to Continuous Teacher Professional Development

The Foundation's approach to continuous teacher professional development is built on the growing recognition of teaching as a dynamic, complex and professional endeavour. It is built on the recognition of teaching as a profession in which – like in other professions – there is a large enough body of knowledge, strong linkages between such knowledge and practice, a common code of ethics and the possibility of practitioners themselves adding to the body of knowledge. It sees the teacher as a reflective practitioner – one who is aware of her beliefs and assumptions, knows how these assumptions influence her practice, is conscious of shifts in her assumptions and beliefs and is open to critically examining her beliefs and ideas about various aspects such as curriculum, textbooks, her role, etc.

Such an approach to continuous teacher professional development rejects the prevailing one-off workshop model and teacher professional development is instead seen here as a continuous long-term purposeful process embedded in the working lives of teachers and daily school processes. Central to such an approach is the need to:

- Give agency to the teacher, a moving away from the prevailing notion of professional development in the country being something imposed on her, to one which is sought out by her based on her own professional needs.
- Provide opportunities for teachers to learn from each other, in environments that promote trust and a common sense of purpose.

Enabling various platforms which facilitate collaboration and peer learning amongst teachers is, therefore, a central aspect of the operationalization of this approach. There is a vast body of literature that supports the understanding that initiatives and experiences that allow teachers to come together periodically and focus on authentic and relevant issues related to their work and the classroom, share, question, reflect, solve problems collectively and take ownership, have a positive impact on their learning and growth. (Lave and Wenger, 1991; Wenger, 1998; Supovitz and Christman, 2003; Bolam et al., 2005; Opfer and Pedder, 2011; and Anfara Jr. et al., 2012).

Such platforms for collaboration and peer learning provide time and space for engagement with relevant educational issues. Further, they also enable channelling motivated teachers to pick and choose from other integrated modes of professional development that the Foundation offers on a continuous basis in these locations. These engagements are tied together by a curricular framework that recognizes the body of teacher professional knowledge – including subject content, pedagogic content knowledge, classroom practices and perspectives – philosophical, psychological and sociological – of education. The curriculum also recognises the context in which the teacher works, which for examples will allow only certain length and frequency of engagement. A non-exhaustive list of such modes offered in any location will include long or short courses, workshops, seminars and conferences.

Given the long-term nature of such an approach, all this is done by establishing institutions (“Field Institutes”) in the locations the Foundation chooses to work in.

Theoretical underpinning for platforms of collaboration and peer learning

The theoretical underpinning of such platforms is based on Situated Learning Theory and Communities of Practice and has also manifested in formal organizational learning models like Common Planning Time, Professional Learning Communities, and Critical Friends Group.

Lave's (1991) **Situated Learning Theory** states that learning is embedded in activity, context and culture, and thus knowledge should be presented in settings and situations that normally involve it. The term **Communities of Practice** (CoP) was first used in 1991 by Lave and Wenger, who later extended this concept to other domains. CoP involves a process of social learning where people with a common interest gather and share ideas and strategies over a period of time (Lave, n. d.). According to Wenger (1998: 125-126) "Communities of Practice are groups of people who share a common concern or a passion for something they do and learn how to do...better as they interact regularly and this learning need not [necessarily be] intentional." Anfara Jr. et al. (2012: 53) noted the "essential component of Situated Learning Theory are interaction and collaboration through which learners participate in communities of practice."

Common Planning Time (CPT) is a scheduled time during the day in which school teachers coordinate team policies and procedures or interact with students and parents or work on curriculum planning, material preparation or student evaluation. Alternatively, they might participate in professional development. The positive outcome of CPT for students includes higher self-esteem, positive perception of the school climate, and higher levels of student achievement. For teachers, CPT contributes to their building a positive perception of their work environment, efficacy, collegiality and overall work-life quality (Anfara Jr. et al., 2012).

Professional Learning Communities (PLC) refers to a group of educators who continuously seek and share learning as well as act upon it. As cited by Bullough Jr. (2007) from the work of Hord (1997), Stoll (2006) and DuFour (2005), PLC builds a culture that supports continuous learning. The essential features of such communities are "shared belief and understanding; interaction and participation; interdependence; concerns for individual and minority views...and meaningful relationships" (Bullough, Jr. 2007: 168). According to DuFour (2007), the three assumptions underlying PLCs are: i) the purpose of school is to ensure increased level of learning for all students; ii) teachers cannot achieve their collective goals in isolation; and iii) verification of effectiveness must be found in student assessment data.

From the experience of National School Reform Faculty, Anfara Jr. (2012) observed that a **Critical Friends Group** (CFG) is a professional learning community of approximately 8-10 educators who join voluntarily to improve their practice through collaborative learning by coming together once in a few months for about two hours. They are practitioner-driven, school-environment specific, with coaches and members and follow specific protocols.

2. VTFs as a Platform for Collaboration and Peer Learning

While examples from the literature – such as the ones cited above – indicate clearly that platforms for collaboration and peer learning result in teacher professional development and even enhance student outcomes in some ways, it does not address the “how” question, i.e., **how can such platforms be created in a context such as the Indian public education system?**

Most examples of such platforms from existing literature are located within the school, which allows professional development to be embedded in the daily lives of teachers. The Indian public education system – partly as a result of its efforts to ensure access to children in the remotest locations – is characterized by the presence of a large number of single-teacher schools and even larger number of schools with less than three to four teachers. Even according to the conservative estimate of District Information System for Education (DISE) data of 2013-14, more than 11% of primary schools and 8% of all schools in the country are single-teacher schools. The average number of teachers in all government schools in the same period is only 4.2 with wide variations along dimensions such as urban-rural. Apart from this, there is the sheer scale of the system, with an average district having around 5,000 teachers spread over a vast area, very often in remote, difficult to access areas.

Such a context demands creation of platforms that enable collaboration and peer learning located outside schools, yet reaching schools spread across locations. VTF is one such platform that the Foundation has operationalised in locations it works in that seek to create such spaces proximate to the teachers places of residence or work, but outside the schools.

They bring together teachers who are voluntarily seeking out opportunities to engage on issues that are relevant to their professional development.

VTFs have been evolving over time as platforms for continuous teacher professional development. Drawing out insights from these experiences could help in designing and operationalizing similar platforms in other locations. For this it is important to understand the following:

1. What are the characteristics of VTFs as they evolve? Are they serving as platforms for collaboration and peer learning among teachers?
2. And more importantly given the context of the Indian public education system, how can we make such collaboration and peer learning platforms happen?

The purpose of this paper is to advance some initial ideas on these questions based on a study of VTFs in four locations across the country and trigger further exploration of these questions.

The scope of the study is limited to the experiences from VTFs in two States and one Union Territory (Sirohi and Tonk districts of Rajasthan, Yadgir district of Karnataka and Puducherry district of Puducherry Union Territory). The description and analysis presented are based on observation of VTF sessions and interaction with participating teachers of these VTFs and members of the Foundation in these locations.

3. VTFs in Different locations

The Foundation has been facilitating VTFs in nearly all districts in which its field institutions operate since 2009. Currently, there are more than 10,000 members of VTFs across the country today, indicating the system's popularity (Rathore, 2016).

However, to begin with, the idea was received with mixed feelings. Hussain and Moger remark, "When the idea of forming VTF was proposed to teachers, some... agreed and... received the idea, whereas [others] showed a feeling of formal order [being] necessary to attend VTFs.... Lady teachers seemed to face difficulty in giving personal time due to domestic responsibility" (Hussain and Moger, 2015:17). From there, VTFs in different locations have traversed diverse journeys; all of which seem to have taken significant effort from the members of the Foundation.

As the idea took root and gained acceptance, teachers displayed remarkable commitment towards VTFs. Giridhar notes, "In... Sirohi, where a feudal, restrictive way of life is still pervasive, a band of women teachers attend voluntary forums in the face of family opposition on one Sunday every month. They do this of their own volition, spending their own money to travel, showing a keenness to learn and grow in their profession, forsaking a holiday whose preciousness for women can never be fully comprehended" (Giridhar, 2016: 39). In a similar vein, Ranjekar noted, "These are the teachers who attend the voluntary teacher forums of Azim Premji Foundation with keenness – on time beyond the school hours – including Sundays and other holidays. They want to give a new meaning to their profession" (Ranjekar, 2016: 6). Such teachers have made VTF a viable forum for professional development.

This paper covers VTFs in four districts, which show different shades of evolution, and reflect different levels of maturity, but a common set of lessons and questions for further exploration. The rest of this section describes the context of these VTFs and locations briefly. Subsequent sections of the paper try to bring out the observed characteristics and insights from these locations; they are based on observation of VTF sessions, interaction with participating teachers of these VTFs as well as some field institute members of the Foundation in these locations.

3.1 Tonk and Sirohi Districts, Rajasthan

The Foundation began work in Rajasthan in 2005 with a programme called "Learning Guarantee Programme" (LGP) in Sirohi and Tonk wherein efforts were made to address the quality of transactions in the classroom. At that time, many reports and experiences highlighted the fact that there was no effective mechanism for teachers to develop themselves as professionals.

In the course of the program, teachers in both these districts, shared that "they are disappointed" by the existing cascade model of "in-service teacher training", which was predominantly conducted in a lecture mode in a ritualistic manner and had little relevance to the day to day challenges they faced. They expressed the need for a better mechanism or something additional to the existing one.

Sirohi is located in the south west of Rajasthan. As per Census 2011, total population of the district is 10,36,346 of which 48.45% are female. Among the total population, the Scheduled Caste is 19.46 % and the Scheduled Tribe is 28.22%. The sex ratio is 938 female to 1000 male. It has 56.01% average literacy (male literacy is 71.09% and female literacy is 40.12%).

As per DISE 2014-15, total schools at elementary level is 1,309 of which 933 are Government Schools. The district marked total enrolment of 1,73,411 children in elementary classes of which Government schools have 1,07,502 enrolment. Teachers in Government schools at elementary level is 4,807. The Pupil-teacher ratio for all schools is 22.

Various alternatives were discussed and many of them were tried out by the Foundation as well. The central idea behind the alternatives was to try and put the control of professional development in the hands of the teacher. From these experiences, VTFs evolved as a forum where teachers as members could steer the discussion in a direction that they would collectively deem appropriate and relevant to their academic needs.

The idea was to nurture a platform for discussion and introspection by teachers, where they could share experiences, question and learn from each other. The idea was widely appreciated by the teachers. The central assumption behind the forum was that teachers would work together to seek collective solutions to classroom challenges, transaction of lessons and related educational issues. The first meeting of this forum was held at Malpura block of Tonk in July 2009 and in Sirohi block in November of that same year.

But the forum at Malpura started to work effectively only by 2010 simultaneously teacher forums were also taking place in other blocks. By 2010, it had been initiated in all the six blocks of Tonk

Tonk is in the north eastern region of Rajasthan. As per the Census 2011, total population of the district is 14,21,326 of which 48.78% are female. Among the total population, the Scheduled Caste constitute 20.6% while Scheduled Tribe is 12.5%. Sex ratio of Tonk is 952 women per 1000 men which is better than the state average of Rajasthan. The literacy rate is 62.46% as per Census 2011. Tonk also has the highest male-female literacy gaps (Male Literacy: 78.27%; Female Literacy: 46.01%).

As per DISE 2014-15, total schools at elementary level is 2,582 of which 1,554 are Government schools. The district marked total enrolment of 2,36,061 children in elementary classes of which Government schools have 1,04,944 enrolment. Teachers in Government schools at elementary level is 7,524. The Pupil-teacher ratio for all schools is 14.

Education: It has a total of 1554 government elementary schools with 7524 teachers and 104,944 enrolment. 21.3% of primary and 8.2% of all schools in the district are single teacher schools; average number of teacher per school being 2.3 in primary and 6.3 overall (DISE, 2014-15)

(one in each block). By 2011, the situation was very different from what it had been originally. Now, teachers residing in other blocks (where there were no VTFs) were requesting formation of new VTFs. In 2012, the Foundation supported 10 such VTFs out of which 2 were independently started and facilitated by teachers. Malpura and Uniara blocks had two VTFs in each and now there are three for each in both these blocks.

It has been over five years since the first VTF began in both Tonk and Sirohi. Significant efforts have gone into the evolution and sustenance of VTFs during these intervening years. Now, there is a sense among teachers as well as members of the Foundation that the VTFs have been successful in achieving the original objective of providing teachers a platform on which to engage in academic discussions in a continuous fashion. VTFs have been formed in all the blocks of these two districts and teachers meet once a month for two to three hours in this forum.

3.2 Shahapur, Yadgir District, Karnataka

Though the Foundation had started its operations in Shorapur taluk of Yadgir District through a programme called the “Child Friend School Initiative” in 2005, it began to work in an institutional mode across the district – including its two other blocks, Shahapur and Yadgir – in 2012.

In the course of their engagement with teachers, members of the Foundation, as well as teachers realized over time the need for focused efforts to build an understanding of content taught and share classroom problems with some periodicity. As in the case of Rajasthan, VTFs emerged as one among many modes that was targeted to address this need.

Yadgir is located at the periphery of North East Karnataka (NEK). The total population of the district is 11,74,271. The sex ratio of the district is 989 women per 1000 men and total literacy rate is 51.83. The literacy rate of men is 62.25 and women 41.38 (Census 2011).

As per DISE 2014-15, total schools at elementary level is 1,247 of which 949 are Government schools. The district marked total enrollment of 2,15,587 children in elementary classes of which Government schools have 165,183 enrollment. Teachers in Government schools at elementary level is 3,843. The Pupil-teacher Ratio for all schools is 40.

Teacher Learning Centres (TLCs): These centres house educational resources focused on teachers, students, youth and community members. They provide space for books, reading, and discussion, workshops, working on teaching aids, TLMs and models. The centres are also equipped with computers, LCD screens and internet connections. They may be located in government school premises or administrative offices at the local level or in any private space which can be easily reached by a large enough group of teachers. There are multiple TLCs in each district the Foundation works in; each of them is facilitated by a centre coordinator.

The Science VTF began in June 2013 in the Teaching Learning Centre (TLC), Shahapur, and was based on shared ideas and the potential usefulness of building a forum for learning and discussing classroom issues related to content and pedagogy more specifically and the development of perspectives of education in general.

Significant effort went into communicating the idea of VTFs and mobilizing motivated teachers to participate in them. Over time, teachers started meeting at a mutually agreed-upon time once a month at the TLC, usually either on a Saturday or Sunday/other holiday. Members used to decide at every VTF what should be discussed at the next meeting. Based on the pre-decided content, members prepared and facilitated sessions at the VTF and conducted experiments accompanied by discussions on learning objectives, rationale and theory behind each exercise. Over a period of time, motivated teachers started arriving armed with serious preparation and began facilitating sessions along with members of the Foundation's district team.

Now each VTF session goes on for three to four hours. The whole group is divided into subgroups of four or five members. In each session, the facilitator introduces a chosen concept (which is pre-determined); there may be a demonstration followed by an introduction to chemicals, teaching learning materials (TLMs) or other equipment, after which the experiments and their practice continue. The VTF sessions are enriched by questions and discussion from the participants. In Shahapur today there also VTFs focused on Social Science, Kannada, English and Hindi.

3.3 Puducherry District, Puducherry

The Foundation started working in Puducherry by training teachers on how to use multimedia content as part of "Computer Aided Learning" programme in 2004. This was converted into a research programme in 2007. Later, in line with Foundation's strategy of deep and continuous engagement in education, a field institute was established in Puducherry in 2011. In the course of working with teachers through continuous school visits and organizing workshops for teachers, the Foundation realized the need for multiple platforms for dialogue with teachers for their own professional development. This need, to a great extent, has been manifested through *Thisaimaani*,

Puducherry is a union territory consisting of four unconnected districts, namely Puducherry, Karaikal, Yanam and Mahe. Two of the former districts are situated inside Tamil Nadu, while Yanam is in Andhra Pradesh and Mahe in Kerala. The population of the territory is 1.24 million as per the 2011 Census, with the majority of people living in Puducherry district (0.95 million). Puducherry as a state fares well in terms of sex ratio and the district has 1,029 women per 1,000 men and an average literacy rate of 85.4% (male 91.25% and female 79.8%).

Puducherry as per DISE 2014-15, total schools at elementary level is 489 of which 282 are Government schools. The district marked total enrolment of 1,29,641 children in elementary classes of which Government schools have 34,056 enrolment. Total number of teachers in Government schools at elementary level is 3,424. The Pupil-teacher ratio for all schools is 15.

a bi-monthly publication for teachers. In response to this need, Teachers' Circle (TC) – the form in which VTF evolved here was christened – emerged as a dedicated effort that worked towards more intensive engagement for teachers in the district at the elementary level.

Members of the Foundation's team in Puducherry put forth the idea of Teachers' Circle to all teachers of the district, stating that a platform for sharing subject knowledge and pedagogy-specific discussions, co-creation of teaching plans and resources, organizing periodic workshops and offering resource support was imperative. After sharing this idea with about 1,000 primary school teachers in the district, Foundation invited them to a visioning exercise in order to build on it further. About 55 teachers who came for the exercise concluded that at least a one-year dedicated schedule was essential to bringing some shape to such a platform and felt it would provide a focused approach to real classroom needs of teachers based on their shared experiences.

The process involved organizing Teachers' Circle and resource creation and its dissemination in a cyclic mode. One Teachers' Circle process cycle started with a visioning exercise (only once in the beginning with a mid-year review to follow) and was followed by a meeting on the third or fourth Saturday of each month as per the availability and convenience of the teachers.

Thisaimaani is a bi-monthly publication that was begun in the year 2013 and meant exclusively for elementary school teachers in Puducherry. The idea was to create a platform for teachers to share their experiences and reflections. When the Puducherry Teachers' Circle came into existence, Thisaimaani was absorbed into it. Articles published in the magazine, included ideas for teachers to carry out a lesson, sharing of reflections on a particular lesson idea, reference notes for concepts, project ideas and book reviews. Ideas for lessons are published based on the syllabus of each grade.

With the commencement of the Teachers' Circle, Thisaimaani has also seriously tilted towards sharing lesson plans and teaching ideas developed and tried out by teachers, as well as the resources mentioned in each lesson plan. This resource material is a scaled-up version of what teachers have tried out in the classroom, and includes story cards, word strips, worksheets, posters and so on. Thisaimaani is distributed to all schools in the district irrespective of their membership in the Teachers' Circle, and individual copies are given to teachers and two sets of resource kits per school. While distributing, special care is taken to explain what are the different lesson ideas and teacher reflections published in the current issue, the relevance, as well as to demonstrate the uses of the resource kit. For recent issues of Thisaimaani please visit: <http://www.azimpremjifoundationpuducherry.org/publications>

The cycle consists of several step-wise planned activities:

- Pre-planning and preparation of resources and lesson plans at field institute before the Teachers' Circle meeting.

- Meeting of teachers and field institute members in subject groups to develop and edit classroom resources (teaching/project ideas, lesson plans, poster ideas, assessment ideas) for one day in a month.
- “Trying out” resources developed in classrooms as discussed in Teachers’ Circle
- Based on their experiences, teachers and DI members reflect, share and finalize their lesson plans, teaching/project/assessment ideas and use of TLMs for one whole day in the next month.
- After many rounds of editing and proofreading, the classroom materials are finalized and sent for printing in “*Thisaimaani*” and Resource Kits.

Recently, the Teachers’ Circle modified its meeting in such a way that first and third Saturday of every alternate month are used for exposure visits, capacity building workshops etc., in order to widen learning opportunities and trying effective ways to get a flavour of the Teachers’ Circle to many more teachers who are not members of the Teachers’ Circle.

4. Observed characteristics of VTF

We hope it would be useful for readers to get a picture of teachers’ participation in these forums before marking key characteristics of VTFs. The teachers participating in the VTFs across these locations are mostly government school teachers at the elementary level. Other private school teachers and people from the community have begun to be a part of this forum, attending occasionally.

In the case of Tonk and Sirohi, during the early stages of VTF (2009-2011), the number of attending teachers was low (12-15 per VTF meeting). Over time, the numbers have increased and teachers’ attendance now ranges from 15 to 22 in each VTF location.

In Shahapur, till the end of 2015, there were 22 Science VTF sessions held over the last two years. It was found that 85 unique teachers had been reached through this platform. The attendance of VTFs varied across sessions, but the average attendance was 14. Many of the discussions and events at the VTFs are circulated in magazines and leaflets periodically.

In Puducherry, among the primary school teachers, 55 had been part of the Teachers’ Circle visioning workshop in the first year (April, 2015) and close to 30 teachers attended in the second year (April, 2016) and of them, 45 teachers are very regular at Teachers’ Circle meetings (since April 2015). This is roughly 5% of the total teachers in Puducherry Elementary schools. Similarly, 36 upper-primary school teachers were also part of Teachers’ Circles and 20-22 of them are very regular, this is 8 % of the total science teachers in Upper primary. The Upper Primary Teachers’ Circle program is named as Young Discoverer’s Program (YDP) and the program runs in collaboration with the department of education, Puducherry. Education Department has issued an order that those teachers who have voluntarily joined YDP can attend workshops/activities of the Teachers’ Circle in working days once in a month.

Apart from participation, there are some common characteristics of VTFs that have emerged across locations; these are critical to understanding VTFs and are discussed in this section.

4.1 Voluntary

Membership and participation in these forums are entirely voluntary, i. e., each teacher can make the choice to become a member. There are neither incentives such as travel allowance/day allowance to attend, or any other material benefits or inducements, nor is participation mandated by any official body or government mandate. Members may exercise their choice in coming or not coming as well as in how to prepare to facilitate a session they like.

4.2 Shared ownership

Ownership of VTFs is shared between teachers and members of the Foundation. While in the initial stages, it tends to be weighted towards members of the Foundation, as a VTF evolves, teachers begin to take greater ownership. Teachers decide upon the themes of discussion, decide when to meet, where to meet, what to discuss, and how to strengthen and expand the forum. Ownership is also reflected in the initiative that teachers display in leading and facilitating discussions and in mobilizing other colleagues to attend and participate. However, across locations, members of the Foundation continue to play a critical role in sustaining VTFs.

4.3 Purposive

VTFs are neither spontaneous nor arbitrary. A VTF is a pre-planned effort where teachers come together at a definite time at a particular place for discussion and reflection on a specific topic with the purpose of teacher professional development.

4.3.1 Planned

Most forums meet for a particular duration of time as determined by pre-decided dates and communicated well in advance. It has emerged that the forums meet for one whole day once a month in Puducherry, for three to four hours in Yadgir, and in Sirohi and in Tonk, teachers meet for two or three hours on a holiday. The period between meetings has emerged as once a month across all locations. The content of discussion is decided in each VTF for the subsequent meeting and in some cases a longer calendar of themes are arrived at.

4.3.2 Relevant Content

To serve the purpose of teacher professional development, the content and nature of the discussion are critical. Like many other features of VTFs this too has evolved over time.

In the initial meetings, most of the topics were chosen by members of the Foundation as teachers were reluctant to suggest topics for discussion. Since making the session participative and dialogic was the prime objective, topics on which every teacher might have something to say and would find

it easy to express their views were chosen deliberately, e. g., provisions of the RTE 2009 in early forums in Sirohi and Tonk.

In the spirit of encouraging ownership by teachers, the practice of jointly deciding the next topic of discussion at the end of every meeting was adopted. This would usually throw up a diverse range of issues from pedagogy to broader issues in education and beyond. However zeroing in on a topic of common interest to all was a challenge. If a topic that was suggested by a teacher three to four times in a row was not addressed or no topic of specific interest to them was discussed then it was felt that teachers may become disenchanted and may even leave the group. Similarly a sort of disconnect could occur between teachers of primary and secondary levels.

Over time, discussions became specific, dealing with different subjects. VTFs were dedicated to different subjects. For example, in Sirohi and Tonk so far, the Science VTF has focused on topics like nature of science, nature of light, experiments in science; in the English VTF, discussions focused on approaches to teaching English in primary level classrooms; in the Mathematics VTF, they have involved the number system, decimals, type of number, meaning of the quantitative sense of numbers, how to use the mathematics kit in schools, and the creation of TLM. In the Social Science VTF, discussions have involved teaching the shape of the earth, and the planet's origins; in the Hindi VTF, the approach to language teaching, punctuation, literature, objectives of language teaching, problems in language learning/teaching and TLM have been discussed. In addition to these there were some other broader topics discussed, such as approaches used in NCERT books, intelligence quotient, aims of education, the role of drama in education, reading campaigns, teaching learning practices, trends in modern education, quality circle time and multiple intelligence, utility of the library and e-resources in teaching, pedagogy, and the role of teachers.

A related issue was that there were many topics which could not be discussed in the short time that a typical VTF offered. An idea of organizing a two-three days long residential voluntary teacher forum (RVTF) emerged from this. First such forum was organized in 2010 at Sawai Madhopur, a district near Tonk. 45 teachers who were part of different VTFs across the six blocks took part in the RVTF; 15 were female teachers.

In Puducherry, as of now, members of this forum are mostly teachers from elementary schools, so most of the content of the discussions is focused on subject groups at primary and upper primary level. Lesson planning exercises, TLM development, and reflection on the out-of-classroom transaction of lesson plans and sharing the same with all the teachers of the district through a bi-monthly magazine, *Thisaimaani* has been the focus of discussion in Teachers' Circle meetings.

When the Science syllabus was renewed for Grades 5, 6 and 7 in 2012 in Karnataka, Science VTF members from Shahapur confessed that many of the introduced concepts were new to them. These teachers therefore selected the topics on which they felt they needed to build their understanding and focused their attention on the same. They conducted experiments on light, oxygen,

photosynthesis, reflection, lenses and on developing low cost and locally available materials for TLM and experiments.

4.4 Democratic and dialogic space

VTFs offer a democratic platform where all members are equal and have an equal right to speak and be heard, whether they be teachers, head teachers, principals or functionaries. All members are treated with equal respect, dignity, and offered equal opportunity to choose, share, participate in and influence topics under discussion. All decisions with regard to the VTF

content, logistics and substance are made through a process of dialogue and norms decided upon collectively. The culture of reflective dialogue in meetings adds value. Views and ideas, differences of opinion of perspective –all of them have a place.

Members of the Foundation from Sirohi and Tonk observe that, “at first the discussion with teachers was very little though the participation of the members was encouraging.” Though teachers did ask questions the onus was largely on the facilitators to engage the teachers. Gradually after successive repeated interactions, teacher participation has grown. Now their engagement has changed and they have started raising questions and slowly, their ownership over the session has also increased. The facilitators added that “teachers now not only ask questions but the quality of the questions has also improved. Now their questions are basically used to strengthen their classroom and academic knowledge.”

“There is openness and freedom to discuss anything – feeling of being heard by someone.”

“There is a feeling that VTF is everyone’s, and not any one person’s.”

“No one is big or small, all are equal; no protocols, we express things naturally and freely.”

Participant Teachers

“There is always an atmosphere of respect in VTF. We all sit together and treat each other equally and with respect.”

“All teachers have their right to present their views in VTF. Though it can be seen in other trainings also, here we feel more confident and open.”

“In other trainings, some teachers do not feel comfortable to speak in a group. But here in VTFs, there is no pressure on anyone, whether they are speaking or not”

Participant Teachers

Yet another experience from Puducherry is that during the initial few months, in the “group editing” of lesson plans in Teachers’ Circle meetings, teachers were hesitant to share questions, suggestions and ideas and alternative solutions with each other. However, over a period of time, as they became more comfortable with each other, they started to lead the group editing feedback sessions. During these sessions many questions were triggered which have been energising and moving this forum towards academic rigour. For instance, when an experiment on sound was being demonstrated, a teacher suggested to the subject sub-group that instead of using glass as previously planned, the experiment could be easily done by using a match box!

In Shahapur also, over time, the teachers have begun to express themselves more openly, and share their concerns and passions and discuss each other’s work.

4.5 Background efforts

Foundation members made extensive school visits and discussed the idea with the identified pool of teachers individually. They spent significant time building connections with teachers in schools and used other platforms like the government head teacher meetings and teacher meetings at the Block Resource Centres (BRCs, the teacher support system at the block level) to discuss the idea in detail. Prior to these interactions, a rough concept and operating principles had already been developed through internal discussions within the team.

The process of identifying and having preliminary discussions with individual teachers paved the way for developing consensus and support for the concept. For example, some of the teachers in the first meeting argued for organizing the meeting during school hours and getting duty leave for participation. However since prospective teachers had been identified carefully and the idea of VTFs had already been discussed with them extensively, a majority of them supported the concept originally discussed and it was agreed that the forums would be held outside school hours and no duty leave would be sought or provided.

As a Foundation member noted, “When we started working with motivated teachers, a group formed slowly and this group took our process forward; because of this a momentum was created in the whole block and the community began to develop more trust in us. This then encouraged even those teachers who were less interested in things like this to join us.”

It is observed that even today there is significant effort being put in by the members of the Foundation in making a VTF happen. This includes planning and preparation for specific sessions including facilitation (or co-facilitation) and providing academic inputs. But it also seems to include even more significant efforts outside of the sessions; this typically includes continuous communication with and mobilization of teachers.

There are also direct and indirect connections and interdependencies between what happens in VTFs to other spaces and modes of professional development offered by the Foundation – e.g., with TLCs, teacher magazines etc.

5. Insights from VTFs

Some insights from this study – especially in the context of trying to create continuous teacher professional development opportunities in India are presented here. It also raises some questions for further exploration.

5.1 VTFs are evolving as platforms for professional development

It is clear from this study that VTFs are indeed evolving as platforms for continuous professional development of its participating teachers. This is not to say that VTFs alone are leading to teacher professional development, but that they are playing a central role in the integrated professional development opportunities offered by the Foundation for participating teachers. VTFs are adding value for strengthening existing support system towards teachers' professional practice and enhance professional identity of teachers.

5.1.1 A platform for collaboration and peer learning

VTFs have evolved to become forums where teachers can solve their problems in a group. When a teacher places her problem in front of twenty to twenty-five others, many different approaches to the solution come up. Teachers who have been part of VTFs believe that this forum has played a pivotal role in their professional development. Whenever they face any school related or academic problems, or even satisfying moments in their career, they share them in the forum. Teachers believe that this platform has solved many educational issues and played a strong supporting role in their lives, giving them space for formal and non-formal discussions and conversations with the rest of their community.

Teachers require platforms like VTFs for free expression of their academic concerns and professional development and currently what are available at institutional level are not adequate to meet this requirements sufficiently, surely there are many micro-stories of success. Participant teachers strongly felt that many times, the existing system of in-service teacher training is a routine exercise and does not touch classroom challenges in real settings. Teachers stated that trainers in in-service teacher training used to come and “say something” based on their preparation but didn't touch what they (the teachers) really needed. The teachers went for such training just as a matter of attendance on official orders rather than in the hope of it contributing to their professional development in any real sense. Teacher organizations too, though they have a widespread membership and reach, have not been using their platforms for the purpose of academic discussions and professional development. In such a situation in the absence of any such forums, VTFs evolved as a platform where teachers could come and engage in discussion in a democratic manner without any hierarchy. In fact mutual appreciation, encouragement and a space for voices and clarifications make VTFs a welcoming space for teachers who find relief in the absence of hierarchy and official judgement on performance which often happens in government mandated forums for professional development.

Teachers expressed that their perspectives towards teaching and pedagogical knowledge itself has improved through these engagements. One participant teacher from Rajasthan remarked, “I realize that we should not treat children differently – we should not teach by focusing only on good children and not paying attention to the weak children... it becomes our moral responsibility to pay attention to all.” Teachers felt that they have also begun to make more sense of the syllabus and engage more deeply with issues related to policies. Instead of seeing themselves as merely completing the syllabus, they are now trying to understand the rationale underlying the syllabus and reasons for the syllabus to change. As a result they seem to have begun to take a broader perspective of syllabus – a perspective that is not limited to textbooks.

Teachers expressed that in VTFs they get knowledge which they can “use in the classrooms”; this they pointed out as a major difference vis-à-vis the regular “in-service trainings”. They felt that the change they are consciously making in their pedagogy is also helping them develop a changed perspective of children and the nature of learning. According to one participating teacher, “I have learnt how to work with children – how to engage them in the learning process. For example, earlier I would draw a flower and explain its parts, now... I tell children to bring a flower and they in turn explain its parts. I now use the activity way of teaching in math class also.... I give them activities so that they develop the concept of measurement through them.”

While this study does not purport to establish a clear connection between these forums and teachers professional knowledge, in a context like that of the Indian public education system, it is remarkable that the teachers are feeling so positive about professional development opportunities. If nothing else, it points to the desperate need for and potential of such forums.

5.1.2 Adding value to the identity and agency of the teachers

According to teachers, the experiences in VTFs have influenced them deeply by connecting them to their professional responsibilities. Teachers expressed the feeling that they have begun reflecting on their professional responsibilities and that has helped them derive meaning from their work; in the words of one participating teacher, “As I listen to discussions, I reflect and understand – what I am, what should I do, what is my responsibility, and how should I work with children. This has helped me get more meaning from my work.”

Teachers have found value in VTFs as an initiative that has motivated them to reflect on their lived experiences in classrooms and share their challenges in planning learning experiences, as well as their struggles for preparation and teaching amidst a variety of conflicting engagements and responsibilities. This study underlines teachers’ perception that their participation in VTF expanded their own mind-sets and beliefs about their profession and role.

The responses of many teachers attested to increased confidence in expressing themselves freely on academic matters as an outcome of attending VTFs. Before this experience, they often felt left

“I have learnt how to work with children – how to engage them in the learning process. Earlier when I was teaching measurement – I used to teach them formula. After coming to VTF – I have begun to realize that this is not a good method. Now I give them activities so that they develop the concept of measurement....”

“Earlier I never used any resource, even where they were available. Now I use globe to teach concepts like latitude and longitude. I have also used it to trace the journey of Vasco do Gama; children now understand abstract concepts better. I have also learned to handle children better. Earlier, I would scold them for their mistakes – now I try to understand the reasons for their mistakes and with care and affection try to correct these....”

“My teaching has changed a lot. I am patient and polite with children. I also see that my teaching has become more organized – I now think of activities through which I can engage children in making sense of their learning....”

Participant Teachers

out and alienated, but VTFs have given them a sense of community and a professional identity. They believe that they can now talk to anyone or to any group of people on most educational concepts, on suitability of a particular pedagogy as well as deal with issues they face in the classroom. Teachers stated that they have gained new respect within their community and among other people who have knowledge of the VTFs. Even the officials who knew the teachers and are part of VTFs have often new-found respect for them. VTFs seem to have provided teachers a space to enrich both their professional and personal lives.

5.2 Making VTFs happen is a complex and painstaking affair

While on one hand VTFs are coming across as addressing an unaddressed and deeply felt need, it is also an effort that is going against the grain. Apart from the legacy of the current systemic efforts described earlier, it is also situated in a context – administrative, socio-economic, and geographical – that teachers find extremely challenging, leading to significantly low motivation towards one’s professional development. This would mean that the factors and efforts that enabled evolution and sustenance of such a platform are very important to understand.

While the current study didn’t look at this in a sufficiently systematic way (for example, it did not involve observation of VTFs as it evolved over years), it does give us some initial insights and leads us to questions for further exploration.

5.2.1 Purposive and significant efforts by members of the Foundation

As mentioned earlier, VTFs are seeded in a culture and environment not very favourable or conducive. The concept and practice of sharing professional experiences amongst school teachers and finding value in the act of sharing, cultivating a culture of collaboration is quite a departure from the norm for most teachers. Therefore to build a culture of collaboration and peer learning has required purposeful nurturing and a very sustained and systematic effort on the part of the Foundation especially in the initial years.

Such systematic efforts have included creating an awareness and acceptance of VTFs amongst the teachers by meeting teachers in various platforms – ranging from interacting with them during large-scale events like the government in-service trainings to meeting them in their schools – and discussing the idea of such a forum for professional development. It has in some cases also involved facilitating building a shared vision for the forum.

The “voluntariness” of the VTFs in its true spirit was limited in the initial years. While teachers did participate after school hours or on holidays without any government order or payment (and hence voluntarily), it required concerted mobilization efforts from members of the Foundation to gather participants. But as the forums have evolved, teachers have been making increased efforts for networking and taking on the role of coordinators and facilitators. However, even now in stable and mature VTFs, members of the Foundation – or in some cases a teacher who has stepped up – require to mobilize participants through reminders.

Apart from the issue of “mobilizing” teachers, it is unlikely that VTFs would have evolved and sustained without significant academic inputs from the Foundation. As we have seen, a key characteristic of VTFs – which also seem to have a significant impact on how VTFs are able to sustain – seem to be its direct, felt relevance to participating teachers’ professional development. One of the issues with the existing “in-service” system has been the lack of teacher educators (resource persons, master trainers) with adequate expertise. This extends to the program and institutional structures – of SSA, DIETs etc., – that are in place but not fulfilling their academic role adequately. Hence availability of knowledgeable and sensitive facilitators who can guide and support teachers in these forums have been a major differentiator.

It needs to be emphasized that these efforts and processes are spread over a period of time and are iterative. It could take several cycles of these processes before a VTF actually gathers momentum. There have been instances where a VTF seemed to have taken off as indicated by a strong attendance and then has petered off once again, requiring continued efforts.

5.2.2 What motivates teachers to attend and actively participate in VTFs?

Understanding what attracts teachers towards VTFs will be important in understanding how to make them happen. As these forums are by their very nature voluntary, the motivation for teachers

should be intrinsic. However, as described above, even the presence of such intrinsic motivation doesn't spontaneously lead to their adoption of such forums; this has largely to do with the legacy of past and existing systems for professional development as well as other more logistical and everyday concerns – like distance, family commitments and expectations etc.

Based on what the teachers say, it seems that a clear motivation comes from the need they feel to improve the Government educational system. This motivation is based on the belief that teachers play an important role in improving the education system. The agency of teachers come out clearly from their voice – teachers feel they can contribute and have a role in improving the quality of education – and this feeling acts as a motivator. The intrinsic motivation for coming to VTF is related to certain deep concerns like raising the quality of education in government schools, and an awareness of the increasing number of people opting for private education. Teachers seem to be confronted with moral tensions within themselves and with a sense of hopelessness because they do not know what to do about it. This was reflected in the words of one of the participating teachers who said, "If I improve myself – I can help to stop the downfall of the education system." They see VTFs as a forum for discussing these feelings and also a way of addressing them.

Another articulated need for coming to VTFs is the need felt by teachers to deepen their pedagogical skills and advance their content knowledge. They feel that the training programmes provided by the Government do not meet these needs of theirs – while there is a potential to develop these. One of the participant teachers was simple and direct when he remarked, "I want to improve my teaching and learn new things in education." The improvement in one's professional skill resulting in improved learning in students leading to increased motivation for teachers plays out as a virtuous cycle which is reflected in what teachers have to say.

However, not all of them come to VTFs initially because of intrinsic motivations – whether triggered on their own or by continuous efforts of members of the Foundation. Many of them seem to attend VTF for the first time casually or out of curiosity, in response to another teacher's request or based on the credibility or rapport that the Foundation has established in the minds of teachers or because of the rapport they share with members of the Foundation. Their first visit is hence triggered by external reasons. One teacher remarked, "I attended first meeting at the request of a teacher friend. The informal and friendly atmosphere in VTF encouraged me to keep coming."

The external reasons are gradually replaced to give way to internal reasons, namely what happens within VTFs – its content (relevant to their professional development) and process (dialogic, in an atmosphere of recognition, respect and trust). These contribute to the continued participation of teachers who recognize value in them.

However, it is also clear that the number of teachers who participate is still a very small percentage. Additionally, attracting lady teachers has been a challenge in many locations. The degree of

engagement and process shown by participating teachers also varies across locations and teachers. The factors that cause this need closer study; an understanding of these may help in mobilizing more teachers and strengthening VTFs and enabling them to make better contribution to teacher professional development.

5.2.3 There may be different processes that work in different contexts

VTFs in each of these locations have a certain process model of working. Though not explicitly distinguishable, they appear to be different, but equally valid ways in which a VTF unfolds.

In one such model that was observed in one of the locations, teachers meet for two or three hours once in a month, discuss concepts based on pre-decided topics. Members of the Foundation prepare well for each session. Most of these VTF sessions are facilitated by members of the Foundation and less often by teachers. Those topics which cannot be discussed within the timeframe of the VTF meeting are taken up in workshop mode later.

Another model seems to be that the sessions unfold based on the emerging needs of classroom transactions shared by teachers in the forum. Based on this, a monthly plan for the VTF emerges from among the participants. The members of the Foundation come well-prepared and motivate participating teachers to do things together during the subject-wise discussions. Slowly, teachers begin facilitating the sessions themselves. Some of these ideas and experiences are shared with all school teachers through magazines, leaflets etc.

A third model looked more structured, including a visioning exercise and application process – for joining the forum – at the beginning of a one year long cycle. The cycle itself involves VTF meetings that focus on preparation of lesson plans and TLMs, trial of these plans in the classrooms followed by meeting to reflect on the experience, incorporate the insights and finalize the lesson plans and TLMs. There are also very specific end outcomes planned in this model – the TLMs and other resources are printed with guidelines for use; these will subsequently be distributed to all schools of the district by Foundation. While there are significant and purposive efforts by the members of the Foundation at each step in this cycle, the attempt is to get teachers to own the process as much as possible; for example, though members of the Foundation have a draft lesson plan at hand, they are not directly shared with the teachers in the meeting. They trigger questions based on the prepared draft and support teachers when they are struggling to set learning objectives and activities for the lesson.

It is not clear whether there are some common principles underlying each of these process models that seem to work. This would need further exploration.

5.2.4 VTFs are not stand-alone forums

VTFs are conceptualized and implemented as part of a coherent and holistic professional development environment, and not as a stand-alone forum. It seems to be a necessary part of teacher professional development efforts, but not by any means a sufficient condition.

The synergy between VTFs and the environment provided by TLCs was what was most observed during this study. TLCs that have been established by the Foundation in various locations within these districts have been instrumental in creating an enabling environment for peer learning and sharing and have emerged as core to organizing VTFs. These centres provide easy access to and allow for the use of reference materials and infrastructure (including computers, internet) for teachers for their professional development. Availability of such an environment makes it conceivable for teachers to have confidence in the possibility of a sustained effort for professional development. This confidence seem to bring teachers to VTF meetings regularly.

Besides providing access to resources and opportunities for teachers these centres facilitate self-enquiry and learning, and provide exposure to connections with a handful of people who have an interest in the career of teachers. The environment has slowly become more energized and vibrant and contributed to the conduct of VTF. So VTF does not become just a forum where people come and discuss and then go, rather it has grown in an organic setting which allows for easy access to educational resources, motivating people who are willing to listen and providing handholding for teachers to allow them further exploration of concepts, theories, classroom management and perspective building.

Similar linkages and synergies are clearly there with other modes of engagements – like courses, workshops – as they are tied together by a common curriculum and plan. These were however not explored in detail in this study and could be an area for future exploration.

6. Discussion and Conclusion

Efforts for continuous teacher professional development in Indian school education system is getting a momentum through various efforts at institutional level as well as with NGO partnerships. Foundation have been adding values to this efforts in a deeper and wider manner through multiple engagement at various platforms. (NCFTE, 2009: 67) stated, “The practice of a teacher cannot be developed through quick-fix strategies and activities, without the development of an accompanying framework/theory on the process of learning and the aims of education.”

The contemporary practice and views towards In-service teacher professional development is narrow except for a few initiatives, “Contemporary educational practice in India tends to view the teacher as an ‘implementing agency’ of larger interests: national interest as defined by the State; a channel of reproduction of the officially approved curriculum via rote learning. The teacher is seen as an empty repository which will be moulded and filled by an enlightened and highly ‘competent’ teacher education system...” (Batra, 2009: 132). Discussion on how to build and nurture holistic

efforts for in-service teacher education reveals that opportunities for free expression on academic concerns and pedagogical issues require non-hierarchical platforms. Such platforms could emerge as opportunities for teachers to share their lived experiences in classrooms, challenges they face in preparing lesson plans, in understanding concepts, content and planning educational experiences, their failures, conflicting engagements, how s/he negotiates with different stakeholders and some more try outs. In these contexts, efforts to build VTF as a professional development forum without any official as well as non-hierarchical manner for teachers slowly find a momentum. Serious efforts and continuous handholding are essential to build such platforms. This needs a lot of time, many visits to teachers, listening to their concerns, trust-building efforts and many academically enabling engagements and environments.

Mismatch between in-service teacher training programs and real classroom challenges could be reduced by continuous engagement with teachers and selection of topics of discussion based on the principle of choice and classroom needs. Construction of TLMs, lesson plans, project ideas in collaboration with teachers, respecting voice of teachers, welcoming attitudes towards their content level as well as pedagogic enquiries can strengthen motivation of teachers to develop themselves professionally. Any efforts to build professional network of teachers should value agency of teacher as well as cater to their real professional needs. In such situations, teachers' responses are found more positive towards professional development, and this is yet another critical learning from VTFs. "Because of the huge diversity in the teaching learning environment in Indian classrooms, apart from their economic and social disadvantages, first generation learners face immense challenges. Only the empowered teachers as a professionally trained and motivated human agent can hope to facilitate the bulk of India's children to bridge this divide in one generation" (Batra, 2009: 129) central insight from this study is.

VTFs are becoming nurturing spaces for teachers, providing a platform where they can express themselves, share their concerns and passions openly, authentically, discuss each other's work, and build a shared understanding. It is clearly contributing positively to the teacher professional development environment in these locations by encouraging collaboration and peer learning.

A central insight from this study is that given a conducive environment, academic motivation and physical facilities, teachers voluntarily find time and means to come together to share and learn from each other. This is consistent with prevailing experiences and research from other parts of the world. Within our own education system such forum can be successful with dedicated efforts, there can be many process models for forming and nurturing such platforms matching to the contexts. We cannot limit VTFs as a stand-alone activity but these are essential part of holistic and integrated teacher professional development. As this initial study seems to show, the answer to the question how to nurture such platforms may lie in a further, more systematic exploration of VTFs and we hope further studies will deepen our understanding.

References:

- Anfara Jr, V. A., Caskey, M. M., Carpenter, J.** (2012). What research says: Organizational Models for Teacher Learning. *Middle School Journal*, 43(5), 52-62.
- Azim Premji Foundation** (2015). APF Voluntary Teacher Forum Shahapur Video.mpg, Retrieved from <https://www.youtube.com/watch?v=YWbNgRnXYI0>
- Batra, P.** (2009). Teacher Empowerment: The Education Entitlement-Social Transformation Traverse. *Education Dialogue*, 6(2) Spring, 121-156.
- Bolam, R., McMahon, A., Stoll, L., Thomas, V, and Wallace, M.** (2005). Creating and sustaining effective professional learning communities. Research, University of Bristol, Institute of Education, Brief RB637.
- Bullough, R. V.** (2007). Professional Learning Communities and the eight-year study. *Educational Horizons*, 85(3), 168-180.
- DuFour, R.** (2004). What Is a 'Professional Learning Community'? *Educational Leadership*, 61(8), 6-11.
- DuFour, R.** (2005). What Is a Professional Learning Community? in *On Common Ground*, DuFour and R. Eake (Eds.). Bloomington: Ind Solution Tree: 31-43.
- DuFour, R.** (2007). Professional Learning Communities: A bandwagon, an Idea worth considering, or our best hope for high levels of learning? Discussion of Jean A. Patterson, Learning Communities in 6-8 Middle Schools: Natural Complements or Another Bandwagon in the Parade? 39(1), 4-8.
- Education and National Development**, 1964-66 (1966). Report of Education Commission, Ministry of Education, Government of India.
- Education Statistics from District Information System for Education (DISE) - <http://www.dise.in>
- Giridhar, S.** (2016). View from the ground. *Learning Curve, Azim Premji University*, XXV, 38-39.
- Hord, S. M.** (1997). *Professional Learning Communities: Communities of Continuous Inquiry and Improvement*. Texas: Southwest Educational Development Laboratory.
- Hussain, Aarif and Moger, Guru.** (2015). A study on science voluntary teacher forum in Shahapur block of Yadgir district, Azim Premji Foundation (unpublished).
- Lave J. and Wenger E.** (1991). Communities of Practice. Retrieved from <http://www.learning-theories.com/communities-of-practice-lave-and-wenger.html>
- Lave J.** (n.d). Retrived from <http://www.learning-theories.com/situated-learning-theory-lave.html>
- Ministry of Human Resource Development (MHRD)** (2009). Teacher Development and Mangement. Discussion and Suggestions for Policy and Practice emerging from an International Conference on Teacher Development and Management. Retrieved from http://www.teindia.nic.in/Files/TE-Vikram/International%20Conference/International_Conference_Teacher%20Development-Udaipur-23-25-feb-2009.pdf
- National Policy on Education, MHRD** (1986). Government of India, New Delhi.
- National Curriculum Framework for Teacher Education** (2010). National Council of Teacher Education (NCTE), MHRD, Government of India, New Delhi.
- Opfer, V. D. and Pedder, D.** (2011). Conceptualizing Teacher Professional Learning. *Review of Educational Research*, 81(3), 376-407.
- Ramachandran, V., Battacharjea, S., Sheshagiri, K. M.** (2008). *Primary School Teachers: The Twist and Turns of Everyday Practice*. New Delhi: Educational Resource Unit.
- Ranjekar, D.** (2016). Brand: Government School. *Learning Curve, Azim Premji University*, XXV, 05-07.
- Rathore, A. S.** (2016). Voluntary Teacher Forum(s): An experience of a journey (Rajasthan). *Learning Curve, Azim Premji University*, XXV, 53-55.

Stoll, L., Bolam, R., McMahon, A., Wallace, M. and Thomas, S. (2006). Professional Learning Communities: A review of the literature. *Journal of Educational Change*, 7(4), 221–258. <http://doi.org/10.1007/s10833-006-0001-8>

Supovitz, J. A., and Christman, J. B. (2003). Developing communities of Instructional Practice: Lesson from Cincinnati and Philadelphia. Consortium for Policy Research in Education, University of Pennsylvania.

SSA JRM (2015). Sarva Shiksha Abhiyan-Twenty Second Joint Review Mission, SSA MHRD, Government of India.

The Teacher and Society. Chattopadhyaya Commission Report (1983-85), MHRD, Government of India.

Thisaimaani. Retrieved from <http://www.azimpremjifoundationpuducherry.org/publications>

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge, UK: Cambridge University Press.

Vision of teacher education in India: Quality and regulatory perspective. Verma Commission (2012). Report of High Powered Commission on Teacher Education, Constituted by the Honourable Supreme Court of India, Volume 1. New Delhi, India.

Thisaimaani. Retrieved from <http://www.azimpremjifoundationpuducherry.org/publications>



Appendices

Appendix 1

Azim Premji Foundation District Institute, Tonk (Work Plan for VTF on “Heat and Temperature”)

Date - 27 April 2015

Place - Newai

Time - 2 hours and 5 minutes (5 pm onwards)

Group - Teachers associated with VTF at Newai

Background Note:

This month we decided to conduct VTF on the topic of “Heat and Temperature” in the Newai team meeting. This topic is dealt with in the class VII NCERT Book. We selected this topic because these two terms confuse many people. We frequently use these terms in our daily lives without a scientific understanding of them.

For example:

- The day is very hot/cold.
- The temperature is very high/low today.
- I need some heat / I am feeling cold. (We sit near the fire in winters. Can we sit near the same fire in summers?)
- I wear warm clothes in winters.
- The floor of the house feels cold in winters and we do not want to walk around without slippers.

I am not saying that we should not use such sentences in our language, but as teachers, we should understand these terms. We can then avoid the confusions that students have in the use of these terms.

We need to ask questions like:

- i) Are “heat” and “temperature” synonymous?
- ii) How are they different or related to each other?
- iii) What are the properties of heat and temperature?

In this meeting I try to explore the common notions of participants about heat and temperature. During the session I will discuss the questions mentioned above and try to understand the participants’ understanding of heat and temperature.

Objectives/Expected outcomes of VTF:

- i) Participants will understand that hot and cold are relative terms, not absolute ones.
- ii) Understanding the concepts of heat and temperature
- iii) Understanding how a thermometer works.
- iv) Understanding the transfer of heat from one system to another.

Please have a look at detailed session plan:

Time	Session Plan
5 minutes	Introduction to the topic and share session plan with participants.
15 minutes	<p>Discussion of the notions of the participants about heat and temperature. Participants will share their common experiences or understanding about cold and hot.</p> <p>During the discussion I will use the following example: If I give you lukewarm water to drink, you may say that this water is too warm to drink. On other hand, if I give you lukewarm tea, you may say that the tea is too cool to drink. Here our sense of hot and cold is related to purpose. (Taken from Eklavya's module on heat and temperature.)</p> <p>Similarly, we can take examples mentioned in the background note.</p>
30 minutes	<p>Do an activity to show that hot and cold are relative terms, not absolute. In general hot and cold depend upon our senses. They are subjective and vary from person to person.</p> <p>Take three containers and fill them with tap water, cold water and slightly warm water.</p> <p>Participants dip their hands in cold water for 10-15 seconds, then transfer it to the tap water container. Dip the other hand in warm water and transfer it to tap water container. Note the sensations in both hands in the tap water container. Now can we say that the tap water is hot or cold?</p> <p>So hot and cold are not separate (distinct and compartmentalized) values but relative ones. We can that say all objects are cold but some are colder than others; or all objects are hot but some of them are hotter than others.</p>
40 minutes	<p>We will discuss the following points:</p> <ol style="list-style-type: none"> i) Measurement of temperature and how the thermometer works. (Clinical and laboratory thermometers) ii) Does equal heating of objects, make them equally hot? (Depends upon the amount and property of object) iii) How does heat flow? High temperature to low temperature, or low temperature to high? Here facilitator gives two puzzles to the participants:

Time	Session Plan
	a) What happens when two equal volumes of 60°C water are mixed with each other? Can you guess the temperature of the new system? b) When an iron ball whose temperature is 45°C is put into 45°C water. Think about the direction of heat transfer. iv) Do an activity to demonstrate heat transfer in solids and liquids. v) Conductors and insulators. (Concepts of thermos, winter clothes, utensils, etc.)
20 minutes	Discussion on the similarities and differences between heat and temperature.
10 minutes	Historical evolution of the concept of heat and its current understanding.
5 minutes	Summing-up and distributing readings: i) Which one will freeze first, hot water or cold water? (From <i>Sandarbh</i> , p. 77) ii) History of thermometers (by Sushil Joshi; from <i>Sandarbh</i>)

Appendix 2



VTF in Newai, Tonk District, Rajasthan: VTF Group activity



Puducherry Teachers' Circle, Batch 2



Puducherry Teachers' Circle: Teachers attending craft workshop during field trip to Dakshinchitra Art Museum.

About the Authors

Aarif Hussain Abdur Raheman Lalmiya

Aarif Hussain Abdur Raheman Lalmiya joined Azim Premji Foundation in 2012 as Campus Associate, and is presently part of the Research and Documentation team. His work includes capacity building of Head Teachers, among the research studies he has contributed to include 'A study on factors influencing parents to pull their children from private to public school'; 'A study on factors influencing parents to pull their children from public to private school'; and 'A study on journey of Science Voluntary Teachers Forum in Shahapur'. He has a Bachelors and a Postgraduate Degree in Business Administration. Email: aarif.ali@azimpremjifoundation.org

Amit Kumar Sharma

Amit Kumar Sharma joined Azim Premji Foundation in 2012 as member of research team, Sirohi, Rajasthan and is presently working with the District Institute, Rajsamnd. He has contributed as a Co-researcher to studies in Action Research such as Study on the usefulness of government head teachers training program and identifying their leadership development needs in Sirohi, Rajasthan", "Understanding Voluntary Teacher Forums: A Research Study in Tonk and Sirohi, Rajasthan" and "*Sirohi Jile ke sandarbh mein Rajasthan ke navin pathyapustak (kaksha 1-8) ke upayogita evam sambandhith shikshak prashikashanon ke prabhaavshilata ka ek adhyayan (In Hindi)*". He has a Masters in Sociology and undergraduate degree in Law. Email: amit.sharma@azimpremjifoundation.org

Gandhimathy K.

Gandhimathy K. is a member of District Institute, Azim Premji Foundation, Puducherry. She joined the Foundation in Computer Aided Learning Program and is currently working with Tamil Teachers' Circle that supports resource generation, classroom try-out and reflection and sharing. She also contributes to various other events on language teaching and learning for teachers. She has a Master's in Sociology and an M.Phil. in Education. Email: gandhimathy@azimpremjifoundation.org

Gladson M. E.

Gladson M. E. is based at District Institute, Azim Premji Foundation, Puducherry. He joined the Foundation as a Campus Associate after completing Master of Social Work. He is currently part of the Environment Science (EVS) team. He works closely with the EVS Teachers' Circle supporting resource creation, classroom try-out, reflection sharing and creating learning opportunities through workshops, discussions, exposure visits etc. He also contributes towards various other events on EVS themes for teachers. Email: gladson.me@azimpremjifoundation.org

Vargheese Kochattu Antony

Vargheese Kochattu Antony works with the Research Centre, Azim Premji University. He has a Master's degree in Educational Planning and Administration from *Jamia Millia Islamia*, New Delhi and Post Graduate Diploma in Child Rights from Tata Institute of Social Sciences, Mumbai. Email: vargheese.antony@azimpremjifoundation.org

Vinod Jain

Vinod Jain is member of the Azim Premji Foundation and has been working with the District Institute, Tonk for the past five years. He has worked with various units of the Foundation such as Communication and Advocacy, Knowledge Resource Centre and Research and was part of VTF Research undertaken in Tonk and Sirohi districts of Rajasthan. He is currently undertaking a study of the journey of Learning Resource Centre in Tonk. He graduated from the University of Rajasthan in Humanities and has a Post Graduate Diploma in Rural Management from Institute of Rural Management, Jaipur. Email: vinod.jain@azimpremjifoundation.org

Yogesh G. R.

Yogesh G.R. leads the Early Childhood Education Initiative of Azim Premji Foundation at Sangareddy District in Telangana State. He joined the Fellowship program of the Foundation and has worked extensively with Primary and Upper Primary Teachers. He was involved in conceptualizing the Teachers' Circle, Puducherry. He is currently mentoring a team of Resource Persons in Early Childhood Education. He has experience of over 18 years in various fields and capacities in Education, IT and Management. Email: yogesh.r@azimpremjifoundation.org

About Azim Premji University

Azim Premji University was established in Karnataka by the Azim Premji University Act 2010 as a not-for-profit University and is recognized by The University Grants Commission (UGC) under Section 22F. The University has a clearly stated social purpose. As an institution, it exists to make significant contributions through education towards the building of a just, equitable, humane and sustainable society. This is an explicit commitment to the idea that education contributes to social change. The beginnings of the University are in the learning and experience of a decade of work in school education by the Azim Premji Foundation. The University is a part of the Foundation and integral to its vision. The University currently offers Postgraduate Programmes in Education, Development and Public Policy and Governance, Undergraduate Programmes in Sciences, Social Sciences and Humanities, and a range of Continuing Education Programmes.



Azim Premji University
PES Campus
Pixel Park, B Block
Electronics City, Hosur Road
(Beside NICE Road)
Bengaluru – 560 100, India.

Website: azimpremjiuniversity.edu.in