



Azim Premji
Foundation

In-Service Teachers Trainings of SSA: What Works & How

(Uttarakhand 2014-15)

Research Report



Acknowledgements

- Ananas Kumar (District Institute, Uttarkashi), Priya Iyer (Azim Premji University, Bengaluru), Vipin Chauhan and Zubair Malik (Uttarakhand State Institute, Dehradun) are the key researchers of the study.
- Devaki Lakshminarayan (Azim Premji University, Bengaluru) provided initial guidance, Saurabh Rai (Uttarakhand State Institute, Dehradun) shared timely inputs and, Indira Vijayasimha and Rahul Mukhopadhaya (Azim Premji University, Bengaluru) reviewed the draft report.
- Hemlata Tiwari, Madan Mohan Pandey, Manoj Shukla, S.K Gaur and Shailesh Srivastava (SCERT) Himani Bisht, R.B. Singh (DIET Dehradun), K.N. Bijalwan and Meharban Singh Bisht (Uttarakhand State Project Office SSA) supported the study.

Index

<i>Abbreviations</i>	4
<i>Executive Summary</i>	5-7
1. Introduction	8-10
1.1 In-Service Teachers Training: Significance	
1.2 In- Service Teachers Training: Uttarakhand	
1.3 Rationale for the Study	
1.4 Definition: ‘What Works’	
2. Methodology	11-12
2.1 Research Objectives	
2.2 Study Design	
2.3 Ethical Considerations	
2.4 Limitations	
3. Findings	13-20
3.1 The Conceptualization Phase of ISTT	
3.2 The Implementation Phase of ISTT	
3.3 The Practice Phase of ISTT	
<i>References</i>	21

Abbreviations

ASER	:	Annual Status of Education Report
APF	:	Azim Premji Foundation
BRCC	:	Block Resource Centre Coordinator
BEO	:	Block Education Officer
CCE	:	Continuous and Comprehensive Evaluation
CRCC	:	Cluster Resource Center Coordinator
DIET	:	District Institute of Education and Training
EVS	:	Environmental Studies
ICT	:	Information and Communications Technology
ISTT	:	In-service Teacher Training
KRP	:	Key Resource Person
MoM	:	Minutes of Meeting
MT	:	Master Trainer
NAS	:	National Level Achievement Survey
NCERT	:	National Council of Education, Research and Training
NCF	:	National Curriculum Framework
NPE	:	National Policy of Education
PAB	:	Planning and Budget
RtE	:	Right to Education
SCERT	:	State Council of Education, Research and Training
SLAS	:	State Level Achievement Survey
SSA	:	Sarva Shiksha Abhiyan
TLM	:	Teaching Learning Materials

Executive Summary

In-Service Teachers Training (ISTT) of Sarva Shiksha Abhiyan aims at continuous professional development of teachers in public education. Over the past decade, activities in ISTTs have evolved, grown in intensity and rigor in varied dynamic contexts. And, a great body of knowledge is generated and is experienced too.

The current study was proposed to share this existing knowledge through an in-depth analysis of processes in In- Service Teachers Training of SSA, Uttarakhand. It looked at ISTT from the perspectives and perceptions of its associated members viz. the teachers, head teachers, BRC and CRC coordinators, faculty members of DIET and SCERT, SSA experts and partner organizations. And, highlights processes in ISTTs that ‘work’ along with factors that contribute to the same; and also suggests aspects that are ‘likely to work’.

Empirical evidence and key findings of study are summarized as following:

What works and how in ISTT

Strengths of ISTT as perceived and experienced by its associated members include:

- **Evolution of long term strategy:** The process of continuous reviews has enabled ISTTs to break free from year by year goals for training to encompass a three year long strategic vision and a broad framework for teachers in-service. Within this duration there is flexibility to add new features in trainings as it rolls out from its conceptualization phase.
- **Areas of training prioritized from multiple sources:** There is a shift from analyzing needs of teachers from a single source of administering questionnaires to prioritizing areas for training through a natural process based on teachers’ feedback, CRCC’s classroom observation reports, state level learning achievement surveys and emerging policies.
- **Shift from multiple themes to depth in areas of training:** The focus is now on depth of curricular content in trainings rather than having multiple topics in a year that included finance and record maintenance. Varied details beyond syllabi are integrated for ex. ways of working with children of different learning styles. Besides, areas that relate to teachers work such as development of teaching-learning plan are also incorporated.
- **Involvement of different level stakeholders in multi-layered processes:** ISTTs are rich in terms of involvement of varied members in all its processes (see Table 1). For ex. teachers, DIET and SCERT faculty come together to develop modules. This brings in diverse perspectives esp. from the ground and teachers also consider this as a learning and satisfying experience for them. Some members like the KRPs and MTs who get associated with ISTT at a later stage go through an intensive orientation involving deliberations on

previous processes such as development of annual plans. This ensures that there is working towards a common goal with shared understanding. Some members are associated with all processes of ISTT bringing in continuity and flow from one phase to the other, binding the program together and taking care of ISTT's cascade model to some extent.

Table 1: Involvement of members/ organizations in various processes

Members	Teachers	State Project Office, SSA	NCERT, ASAR etc.	SCERT	DIET	CRCC	BRCC	Partner organization
Processes								
Conceptualization Phase								
Development of Annual Plans		✓		✓	✓			✓
Identification of Areas of Training	✓	✓	✓	✓	✓	✓	✓	✓
Preparation of Modules	✓	✓		✓	✓			✓
Orientation to KRPs	✓	✓		✓	✓			✓
Orientation to MTs	✓	✓		✓	✓	✓		✓
Implementation Phase								
Transactions of Trainings	✓				✓	✓	✓	✓
Management of Trainings	✓					✓	✓	✓
Practice Phase								
Follow Ups	✓				✓	✓	✓	✓
Onsite Support	✓				✓	✓		✓

- **Bridging of gap between training and practice:** Follow up process serve to strengthen learnings both for teachers who attended the training program as well as those who did not. Onsite support process bridges gap between trainings and practice and issues get addressed on the ground on a regular basis. Feedback obtained from these sessions helps in planning future ISTTs. Both these processes provide an environment of continuous learning and sharing of experiences for teachers in service, and are high in demand both in frequency and intensity.

What is likely to work and how

The findings also give an overview of the likely course that ISTTs could take by working on its limitations as suggested by its associated members:

- Though annual plans are made at different levels (block, district and state) suggesting coordinated efforts in conceptualizing trainings, there is a suggestion to make ISTTs decentralized by providing autonomy to teachers of a block or a district to plan and implement trainings as per their contexts. There could also be block level resource teachers for continuous support to schools on their specific needs. Further, linkages between block level resource teachers and in-service teachers training could also be thought of.
- There is an emerging view to deliberate and address issues that arise from certain socio-economic realities and conditions in schools. For ex. age in-appropriate admissions in schools, absenteeism of children, lack of physical facilities (electricity) and resources

(library), shortage of teachers and dwindling rate of enrollment. Some of these issues are brought to focus by parents and it is important that their voice is taken into consideration while planning ISTTs. Also, as these contextual issues vary from place to place, the meetings at cluster, block level could have deliberations on the same.

- Associated members find ISTTs useful, they see its value and offer many constructive suggestions. Resource persons demand inclusion of more theory in modules. Teachers offer many ideas on its various aspects such as its planning, modules or areas of training and also show preparedness to take ISTTs to another level. For e.g. they want to deliberate on certain content areas or activities as mentioned in modules, relate with their rationale and underlying theories instead of only participating in activities in trainings. Scope for including such activities during trainings needs to be taken into account.

Way Ahead

The study calls for sustenance of ISTTs in the context of Uttarakhand in aspects of long term planning for training with a stress on decentralization - meaning autonomy to districts to decide the content of trainings based on their needs and evolving a mechanism of transaction using local resources of knowledge and experience. Further, broad based selection of areas of training, involvement of varied stakeholders in different processes and the highly appreciated process of follow ups and onsite support needs to be carried forward too.

Novel idea of critiquing modules instead of transacting the same; and expanding areas of training beyond curriculum and pedagogy to encompassing issues that arise from socio-economic realities and conditions in schools are important curricular areas that the study reflects on for Teacher Education and also its implications on training processes. In this respect, the study draws attention towards adding the voice of various stakeholders such as parents, teachers and school administrators in building educational content for ISTTs.

Further, the study gives directions for taking up research work to next level by comparing and validating findings with existing theories, to establish further relationships and arriving at theoretical categories for SSAs In-Service Teachers Trainings.

1. Introduction

1.1 In-Service Teachers Training: Significance

Continuing professional development and support for teachers in service has been emphasized in various policies and reports. The Kothari Commission 1964-66, reflected the need for continual professional education of teachers along with the rapid advances in various fields of knowledge and evolution of pedagogical theories and practice; the Chattopadhyaya Committee 1983-85, added that if there is to have a change in the approach of teaching there has to be first a change in Teacher Education and concurrently in professional education; and the National Policy of Education (NPE) 1986, 1992, called for a continuum between pre-service and in-service teacher education. Following NPE guidelines, the District Institutes of Education and Training (DIET) were established in 1987 to provide on-site support to teachers in the field. The District Primary Education Program (DPEP) 1995, initiated the concept of Resource Persons from each block and cluster (the BRCC, CRCC) to support primary school teachers.

In-Service Teachers Trainings (ISTTs) have been an integral part of the flagship program Sarva Shiksha Abhiyan (SSA) since 2001 to support elementary school teachers across the country. The National Curriculum Framework of Teacher Education (NCFTE), 2009 stressed the need for renewal or up-gradation in the knowledge and practice of teachers already in school. And, the current 12th five year plan, 2012-2017 calls for considerable enhancement in the quality of teachers training and the rigor of teaching certification for improving teacher competence. Further, the plan reiterates the important role of SSA in elementary education with a strong focus on teachers and educational leadership.

Literature provides several studies citing 'positive impacts' of ISTTs. Yadav (2012) reports positive impact on classroom transactions in the use of teaching skills, subject teaching, use of TLMs, teacher behaviors, curricular activities etc. Yadav B. and Bhardwaj P. (2013) have shown that the positive impact was limited to teachers who were able to resolve class room difficulties by consulting various sources such as print material, audio-visual material and the internet. Singh D. (2013) reports usefulness of ISTTs in the areas of TLM application, activity based teaching, child-centered approach and subject enrichment. Siddiqui T. (2014) found high impact of trainings for classroom management, use of TLMs, action based teachings, environmental education, skills of framing questions and tabulation. And, Mohanty S.P. (2014) found significant positive effects on the skills of teachers in introducing and presenting lessons, in explanations, in posing questions and students participation.

1.2 In- Service Teachers Training: Uttarakhand

In-Service Teachers Training in Uttarakhand is organized in two levels:

The SSA plans and administers ISTT for the entire State and the DIETs do the same in their respective districts; and both coordinate with the SCERT for academic support. The DIETs have their own frameworks for district specific teacher trainings but since their budget for training is less (as compared to SSA), their trainings are limited in number and coverage.

Thus, SSA continues to have a larger say in Teachers Trainings in Uttarakhand. It organizes 5 days institutional training at block level, and another 5 days at cluster level with follow-ups. The SSA framework of ISTT (2008) follows the NCF (2005) and NCERT guidelines (2007) that emphasizes constructive approach in teaching learning and, teachers as facilitators of children's learning. **The current study is focused on SSAs framework of ISTT organized for 10 days in a year for block and cluster level elementary school teachers in Uttarakhand.**

Table 2: Coverage of ISTTs (2012-14) through SSA

Year	2012-13			2013-14		
Interventions	PAB Target	Achievement	Percentage	PAB Target	Achievement	Percentage
Block Level	41976	39862	94.9%	43193	36564	84.7%
Cluster Level	41976	38841	92.5%	43193	37875	87.7%

1.3 Rationale for the Study

Literature provides evidence of studies that have 'evaluated' ISTTs and highlighted their 'outputs and outcomes'. Studies have also 'assessed' the quality of a 'few inputs' provided during trainings: Eswaran S. and Singh A. (2008), and Malik R. and Bharadwaj P. (2013) studied training content and transactional approaches; Abraham J. and Wadhwani R. (2013) looked at the integration of ICT in trainings and Singh D. (2013) studied modules used in trainings.

While certain researches have focused on a few specific inputs; others have provided a 'generalized view' of ISTTs and are 'critical' of its 'cascade' model. 'Teachers feel that trainings they receive at the Mandal /cluster level is not the same that is first intended to be delivered at the state/national level; there is dilution in the dissemination of training, and the ISTT expectations and the realities are divergent', Kidwai H et.al. (2013).

Some studies have also tried to see the 'awareness and attitude of teachers' towards ISTTs. Kotreshwaraswamy A.S. (2012) showed that there was no significant difference between rural and urban, male and female teachers' attitudes towards ISTTs of SSA. Katiyal D. (2014) showed

that young and newly recruited teachers were aware about the concept of training and development.

Thus, research on ISTTs so far have viewed its inputs, assessments, impact, awareness and attitude. Also, such studies have only taken into account 'views of teachers' who of course are its main stakeholders, but have excluded many other members who are a part of ISTT and are equally significant. Besides, no study has comprehensively covered 'all processes' of ISTTs such as its planning, Implementation and follow-ups. 'There is little research into the status of school support activities on ground, or detailed understanding of even reported successes and failures' (NCFTE, 2009). Further, there is a lack of understanding provided through research on 'suggestions to strengthen ISTT's cascade model'.

The current study looks at ISTT from the perspectives and perceptions of its associated members viz. the teachers, head teachers, BRC and CRC coordinators, faculty members of DIETs and SCERT, SSA experts and partner organizations. It shares their point of references and experiences in highlighting processes in ISTTs that 'work' along with factors that contribute to the same; and also suggests aspects that are 'likely to work'.

1.4 Definition: 'What Works'

The study looks at all phases and processes of ISTT through its associated members:

- Their Perspectives (frame of reference): What aspects of ISTT do they find useful and relevant and what factors do they attribute for the same? What could be strengthened and how?
- Their Perceptions (experiences): What aspects of ISTT have they experienced as strengths and what factors do they attribute for the same? What could be strengthened and how?

Thus: 'what works and how' is the data of strengths along with their enabling factors and 'what is likely to work and how' is the data of limitations backed by concrete suggestions to address the same.

2. Methodology

2.1 Research Objectives

To identify processes that ‘work’ and ‘likely to work’ along with their influencing factors from the perspectives and perceptions of members associated with In Service Teachers Training of SSA in Uttarakhand.

2.2 Study Design

The study covered all phases and processes of ISTTs:

Table 3: Phases and Processes of ISTT

Phase 1: Conceptualization	Phase 2: Implementation	Phase 3: Practice
Process I: Development of Annual Plans	Process V: Transactions of Trainings	Process VII: Follow ups
Process II: Identification of Areas of Training	Process VI: Management of Trainings	Process VIII: Onsite support
Process III: Preparation of Modules		
Process IV: Orientation to Resource Persons		

Purposive Sampling was used in the study wherein the size of sample and data was ‘continuous and incremental’. Semi-structured tools were developed to collect data that was analysed continuously to verify relationships among emerging concepts and patterns. Tools were also made continually to seek further details, clarifications and to substantiate findings.

Primary data was obtained through 37 observations of 6 processes of ISTT, interviews of 46 members and questionnaires administered on 90 participants in implementation and practice phases of ISTTs (see table 3). Secondary data comprised of various documents used in each phase: minutes of meetings, meeting announcements, training schedule, concept note, observations and feedback formats, reports of observations of training, of follow ups and onsite support.

2.2 Coverage

ISTT processes of development of annual plans, preparation of modules and orientation to KRPs were facilitated at the State level. Dehradun being the state capital provided the main source of data for such processes of the study.

Orientations to MTs at district level were facilitated by their concerned DIETs, Transactions of trainings were at block level and follow-ups and onsite support were organized by cluster resource center coordinators at cluster level. These processes were studied in Dehradun and Uttarkashi districts. District Uttarkashi was chosen keeping in view challenges that Teacher Education Institutes face in difficult geographical terrains.

Table 4: Tools and Sample

Primary Data					
Interviews	#	Observations	#	Questionnaires	#
SSA Coordinators (Pedagogy)	3	Development of Modules	1	Teachers (implementation phase)	40
Faculty members of SCERT	5	Field Testing of Modules	2	Teachers (practice phase)	50
Faculty members of DIET	5	Orientation to KRPs	1		
Teachers/ Head Teachers	10	Orientation to MTs	5		
CRC Coordinators	3	Transactions and Management of Trainings	20		
BRC Coordinators	6	Follow ups and Onsite support	8		
Resource Persons (APF)	12				
Resource Persons (others)	2				
TOTAL	46		37		90
Secondary Data					
Various Documents (2012- 13) in all phases and processes					

2.3 Ethical Considerations

Informed consent was obtained from members prior to administration of tools and permission was sought to observe various processes of ISTTs. The purpose of research was shared with each concerned member before engaging with them and their identities are kept confidential.

2.4 Limitations

The sample of study is small and is largely confined to participants in Dehradun and Uttarkashi. The study is primarily focused on ISTTs conducted by SSA and does not take into account trainings of DIETs.

3. Findings

Data was collected by critically engaging with 3 phases and 8 processes of ISTT (see table 3). Analysis was made all through the way as ISTT unrolled from its first to the last process. The following section shares insights on processes that ‘work’ and ‘likely to work’ along with their influencing factors from the perspectives and perceptions of its associated members:

3.1 THE CONCEPTUALIZATION PHASE OF ISTT

Members from SSA, SCERT, DIET and partner organizations are involved in the Conceptualization Phase i.e. the reviews and planning for ISTT. They deliberate on previous years’ training plans, modules, resource persons, teachers’ feedback and CRCCs’ school observation reports etc. to make goals for trainings in the State.

Analysis of secondary data shows that annual plans (before 2012) were a mechanical exercise with no forward or backward linkages. There was a realization that several aspects were lacking in ISTTs that needed to be taken care of; and these were in the areas of training, process of transaction, resources, space, resource persons, time frame and logistics.

‘Trainings were lecture based, multiple themes and topics were covered every year such as subject specific hard spots, micro-teaching, inclusive education, assessment, record maintenance, mid-day meals etc. Further same modules were used for primary and upper primary teachers and trainings were not supplemented with adequate resource materials. They were not carried forward with adequate follow ups and support systems, and were organized during summer vacations when teachers needed a break’ (MoM, 12th March 2012).

Process I: Development of Annual Plans

The ‘reviews’ in 2012 led to the renewal of strategy of ISTT and development of a Three Year Plan (2012- 15) of Trainings for the first time in the State; and following decisions were taken:

- Trainings will encompass a longer time span of three years (a break from one year plan of ISTT) with continuous reviews during the year.
- There will be focus on two- three subject areas and related topics like assessment of training per year.

- The Key Resource Persons will either be a DIET Faculty, a retired teacher/teacher educator or a member of partner organization. Master Trainers will be either teachers, cluster resource coordinators or members of partner organization.
- Modules will be prepared separately for each grade by members from SSA, SCERT, DIET, teachers, retired teachers and partner organization. They will be developed after a thorough orientation for 10 days.
- Additional reference materials will be provided to resource persons and facilitators to enhance conceptual base and get support in facilitating sessions.
- Annual Plans will be made first at the block, followed by district and state level.
- **The review process has made ISTTs comprehensive and flexible:** ISTTs now have a three year long perspective plan for teachers' in service training. There is flexibility to add new features within this time frame aligning trainings with emerging needs. For example, modules were piloted for the first time in clusters adding to their validity; and posters on varied themes such as on philosophy and literature were displayed in the training hall to bring aesthetics and vibrancy. *'This is a good preparatory approach of initiating a program in the State with lessons drawn from practice (a SSA member). 'New additions are possible when we pause and reflect' (a SCERT faculty).*
- **The focus has shifted from range to depth in content areas of trainings:** Narrowing down areas for trainings (three per year) has brought scope for integration of varied details in curricular content such as: perspectives, concepts and application. *'Earlier trainings were confined to school syllabus but now there are philosophical topics covered too. Chosen topics relate to teachers work like development of teaching-learning plan and evaluation of text book' (a partner organisation member).*

Table 5: Areas of training (2012- 15)

Academic Year	Proposed Areas	Identified Areas	Focus Area
Y1, 2012-13	CCE, Language, Math	CCE, Language, Math	Nature of Subjects
Y2, 2013-14	Same + Arts	CCE, Gender (state level) Language, Math (district level)	Content, Pedagogy
Y3, 2014-15	Same + Science	CCE, Language, Math, EVS, Science	Same

- **ISTTs could be decentralized:** Though annual plans are made at different levels (block, district and state) suggesting coordinated efforts in the conceptualization of ISTT, still it is perceived as having a centralized tag attached to it. Teachers suggest that 5- 6 schools in a cluster could plan their own goals of training, pool in resources from amongst themselves and conduct trainings based on their specific contexts and needs.

It is also suggested that ISTTs match experiences of teachers; thus some topics could be made common to all teachers like the RTE or CCE; and other topics for a certain group of teachers only. *'Such a structure would ensure that all teachers are not treated the same' (a*

SCERT faculty). It is also important that districts develop their training packages in sync with their actual needs rather than developing them in a centralized manner.

Process II: Identification of Areas of Trainings

Trainings are designed after identifying areas along with appropriate approaches, methodologies and resources. Members from SSA, NCERT, partner organizations, faculty from SCERT and DIET, CRCC, BRCC and teachers are involved in this process. For identifying areas of training, there are deliberations on school observation reports and learning level surveys at state level. Besides, there is analysis of post training feedback of teachers, inputs received from module developers, facilitators and observers of trainings.

- **Areas for training are prioritized from multiple sources and follows a natural process:** Content area for trainings are also decided from an analysis of observation diaries of faculty members of DIET and interactions with teachers. *‘These are a part of one’s routine work and practice and reflect a sequential, bottom up approach’ (a SSA member). Following Rte., trainings included CCE as an area for training integrating policy’ (a faculty member of DIET).*
- **Teachers demand trainings to deliberate on crucial issues:** There are certain areas that teachers consider as critically important relating to complexities in schools and those that arise from socio-economic realities. For e.g. lack of physical facilities (electricity), resources (library), shortage of teachers, late admissions of students, dwindling rate of enrollment and absenteeism of children employed in seasonal work. One step ahead, teachers also want to equip themselves to be able to address the same themselves instead of receiving prescriptive suggestions. It is suggested that as these issues are contextual and may vary from place to place, the meetings at cluster, block level could address the same.

Process III: Preparation of Modules

After need analysis, modules are developed for Key Resource Persons (KRPs) and Master Trainers (MTs). Members of SSA, subject experts from SCERT and DIET, teachers and partner organizations work together to develop modules and total engagement in this process is about three times more the actual training days. The



session begins with a shared understanding on annual plans and identified areas for training besides reflecting on previous years' modules.

- **Involvement of varied members enriches modules and is mutually satisfying:** Subject specific team brings in required depth of content in modules, teachers share activities worked in class. *'This ensures that tried out ideas from classroom into modules' (a SCERT faculty). There is scope for teachers to bring in their experiences and inputs and not merely be the 'receivers' of trainings' (A CRCC). This is the first time I am a part of module development and I realize the amount of effort that goes into trainings' (a teacher).*
- **Modules trigger ideas for practice:** Besides aligning modules to the state curriculum, there is an effort to introduce topics like how to work with first generation learners, children with varied learning styles, identifying common problems in classrooms and working on their possible solutions. Once developed, the modules are analyzed and tested in the field.

Process IV: Orientation to Resource Persons

Members involved in this process include SSA, SCERT, DIET, CRCCs teachers and partner organizations. Orientation program for Key Resource Persons (KRP) takes place in a residential mode for 10 days with total engagement time about double the actual training days. There are



deliberations on concepts, facilitation skills, planning and organization of trainings.

KRPs also analyze modules and revisions are made in the same based on their inputs. As some KRPs are not involved in the previous process i.e. development of modules, this exercise helps their building familiarity with the same.

KRPs take their learning forward to orient Master Trainers (MTs) and CRCCs. This process involves 8 days of work with total engagement time about 1.5 times more than the actual training days. This is a non-residential training and is similar to KRPs. The time gap between KRP and MT training is of 10-15 days. The CRCCs prepare themselves for the next phase of ISTT i.e. the Follow ups and Onsite support by going through modules of each subject.

- **Orientations to resource persons encompasses conceptual and technical aspects:** Observation reports show that the session had deliberations on low math achievement of students in the State, reasons for the same and possible solutions. There were discussions

on various topics such as aims of school subjects, integration of teacher and student led activities in classrooms and remedial teaching. Examples of technical aspects included: how to communicate the agenda of trainings, ways of giving instructions for an activity and steps to be followed to encourage greater participation in training programs.

'In one activity we analyzed children's work in their note books to understand where children make most mistakes, and what can teachers do in such instances. There were discussions on how we need to encourage children when they come up with own approaches to solve problems instead of teacher suggested methods' (a KRP).

'Five groups were made and each group was assigned the task to prepare a lesson plan for a class. We discussed the objectives of the chapter, choice of pedagogy, relevant resources for activities and evaluation. The Facilitator asked constructive questions, encouraged discussions and summarized missing points' (a CRCC).

'We worked in two groups, hypothesized whether the given food stuff had protein/fat or not; and tested to validate our hypothesis. We analyzed a text book and its varied concepts, developed TLM in small groups and discussed their usage in classroom. I liked this activity and feel that it would be useful for teachers' (a KRP).

- **Resource Persons express the need to make orientations more theoretical:** They expressed that there should be discussions on the objectives, rationale behind activities or certain approaches cited in modules. *'Adding theories and principles behind each activity will take care of lack of subject specific resource persons for trainings' (a partner organization member).*

3.2 THE IMPLEMENTATION PHASE OF ISTT

Teachers Trainings are conducted at block level and there are two-processes in the second phase of ISTT.

Process V: Facilitation of Trainings

Observation reports showed that trainings began by sharing of reports of ASER, SLAS, and NAS on the status of poor math and language scores of children in Uttarakhand and the subsequent decision to include related areas in trainings during the year. Trainings are facilitated around modules.

- **Teachers find an emotional**

connect: The general environment during trainings is informal. People get to know each other as they come from different schools, they share experiences, learn how each one deals with varied contextual problems in teaching- learning, in school



management or the community. *‘Here I see that all teachers have similar problems and I am not alone’ (a teacher).*

- **Trainings are participatory in nature:** Activities in training include group discussions, demonstrations and hands on tasks. Language sessions have story-telling and story writing activities; mathematics has problem solving and science has experiments. Audio visual and reading materials are used as required.

‘How a single problem or concept in mathematics is dealt with arts or games is something that I got exposure to in trainings. We get to revisit old concepts and acquire new ones’ (a teacher). There are activities on how to introduce and conclude a topic, how to ask questions and address children’s query (a KRP).

‘Trainings have helped us create a teaching - learning environment in school. ‘Fear has gone from schools, children are confident, are now asking many questions’ (a head teacher). ‘If one compares elementary school teachers with that of secondary schools, we would find that the former will have a lot of knowledge on CCE, pedagogical approaches and theories of learning such as constructivism’ (a SSA member).

- **Certain topics in modules need to be deliberated upon and not transacted:** While some teachers wanted inclusion of higher level concepts in modules others suggested that they be involved in analyzing certain topics or activities in modules, critique them and relate to their theories. This is suggested as a new form of transactional approach in trainings instead of only participating in varied activities.
- **Teachers offer constructive suggestions on ISTTs:** Teachers see correlation between content, activities and facilitative mechanisms and appreciate the effort that goes into designing the same. They also argue against the do-ability of certain approaches used in trainings as it clashes with what is expected from them. *‘When officials visit our school they ask questions to children based on memory and want us to report how much syllabi is completed. These contradict ideas stressed in trainings like ‘no rote learning’ or ‘learning as per one’s own pace’ (a teacher).*

Process VI: Management of Trainings

A team is in action and supplements each other’s work on the training day. It was observed that though the MTs are fully in charge of facilitating trainings, the BRCCs pitch in at appropriate times. Block education officers (BEOs) were observed taking stock of attendance of participants, BRCCs take care of logistics, distribution of modules, stationary, meals etc. BRCC also inaugurate the session, share the 5 day schedule and introduce the facilitator. During one training, the BEO was seen interacting with teachers; and members of partner organizations are present all days throughout the training sessions. BRCCs along with members of partner organization were also decorating the venue with posters and educational quotes to make it academically vibrant. Laptops and projectors were also arranged and used in trainings.

Though teachers’ attendance in trainings is positive, they suggest to re-schedule the program as it disrupts school’s functioning. *‘On an average 38 teachers from one block attend trainings and there is almost 100% attendance. But trainings clash with students term-exams, training of two subjects are organized simultaneously and if a teacher misses one session they miss two subjects. Similarly, if a couple of teachers from one school attend training there is a difficulty in substituting classes due to shortage of teachers. Children skip school when they know that teachers have gone for training; and parents’ complain about the same’ (a head teacher).*

3.3 THE PRACTICE PHASE OF ISTT

There are two processes in the final phase of ISTT.

Process VII: Follow ups

Follow ups are interactive sessions with teachers organized by CRCC at cluster level after two months of training providing teachers sufficient time to practice.

One day is allotted for each subject and teachers from cluster come along with children's actual work in copies or as projects. They share their teaching-learning plans, discuss ways in which



they organized their classes and also discuss other teachers' work. Besides, they also fill up a questionnaire on recently conducted trainings.

- **Activities in follow-ups help to strengthen learnings:** Activities are such that teachers get to revisit areas from their trainings. These help both teachers who attended training as well as those who did not. Since the follow up group is small (cluster level), it generates better discussions. Teachers get space to share experiences from practice and also touch upon areas that they have not yet initiated in their classes. *'These sessions are useful for new concepts. For e.g. after a concept say CCE is initiated in trainings; subsequent engagements on it in schools with mentors strengthens learning' (a partner organization member).*

'A group activity was initiated wherein teachers were to discuss a concept in a module. The topic was such that it was not yet initiated in the class and served as a 'model classroom session' (a SCERT member). I find this session important as I am able to clarify doubts in the midst of an academic year' (a teacher).

'A teacher from a remotely located school brought resources (a shoe box, mirror, incense sticks) that she had used to work on the concept of 'light travels in a straight line' (a partner organization member). 'Teachers narrated activities that they initiated in their classes, shared challenges and ways that they overcame the same' (a CRCC)

'During discussions, teachers provided specific examples from their classrooms, gave their opinions on matters, shared their agreements and disagreements' (a DIET faculty). 'These sessions provide us ample opportunity to express ourselves and are more fruitful than the five day block level training' (a teacher).

- **Follow-ups connect with classroom processes and break the isolated nature of trainings:** Earlier trainings were such that teachers were ‘trained’ for a particular duration of time and ‘sent back’ to their schools for teaching. Follow ups processes have bridged the gap between trainings and practice. Teachers get opportunity to put their learnings into use, share their experiences and strengthen their observations with inputs from peers and facilitators. Issues are discussed in specific contexts of schools and addressed with shared understanding and perspectives.
- **Follow-up sessions support in planning of ISTT:** They serve to gauge academic environment of schools, the extent to which teachers have been able to relate with trainings and modules, the gaps in their planning and practice. Insights on these help in improving modules and supplementary resources. *‘These sessions are important for CRCCs as they get to know various challenges in schools’ (a head teacher).*

Process VIII: On-site support

As per the mandate CRCCs visit every school of their cluster once a month. And, as onsite support the CRCCs and also DIET faculty discuss teaching- learning problems with teachers and demonstrate lessons where children have conceptual difficulties.

- **Focus of school visits needs to be exclusively on academic aspects:** It is noticed that CRCCs are often engaged in monitoring management of MDM, construction work, collection of data etc. taking away most of their time from academics. In this regard it is suggested that school visits of CRCCs and faculty members of DIET need to only focus on teaching-learning processes in schools rather than administrative aspects.

***** *** *****

References

1. Eswaran, S. & Singh, A. (2008). A study of effectiveness of in-service education of teachers, All India Primary Teachers' Federation. Retrieved from http://download.ei-ie.org/Docs/WebDepot/AIPTFIndiaEffectiveness_%20of%20In-Service%20Training08EFAIDS
2. Katiyal, D. (2014). Effectiveness of Teachers' Training and Development – A Demographical Study, Research Journal of Management Sciences, Vol. 3(1), 6-9.
3. Kidwai, H., Burnette, D., Rao, S., Nath, S., Bajaj, M. & Bajpai, N. (2013). In-Service Teachers Training for Public Primary Schools in Rural India: Findings from District Morigaon (Assam) and District Medak (Andhra Pradesh), Columbia Global Centers, Mumbai, Working Paper Series (no. 12). Retrieved from http://globalcenters.columbia.edu/mumbai/files/globalcenters_mumbai/MDEP_WP12_Teacher%20Training%20
4. Kumar, Vijaya, B. (2005). A study on teacher training under SSA, Thiruvananthapuram, State Resource Centre. Retrieved from http://shodhganga.inflibnet.ac.in/bitstream/10603/1546/18/18_chapter%202.pdf
5. Kotreshwaraswamy A. (2012). A Study of Attitude of Teachers towards In-services Training Programmes of Sarva Shiksha Abhiyan. Indian Journal of Research, Vol. 1(12), 42-44.
6. Jessy, A., & Wadhvani, R. (2013). ICT Integration in In-service Teacher Education Program. International Journal of Information and Computation Technology, 3(9), 901-908.
7. Lakshminarayana, U. and Babu, S.G.V. (2003). Indicators of teaching competence of teachers in DPEP and non-DPEP schools. Studies on Researches in Indicators of Quality education at elementary stage, NCERT, New Delhi
8. Malik, R.K., Bhardwaj, P. (2013). Effectiveness of In-service Teacher Education Programmes at Elementary Level in Punjab. Educationia Confab, Vol. 2 (6), 17-35
9. Mohanty, S.P. (2014), In-Service Training at Elementary School Level: Impact on Classroom Practices. Learning Community, Vol. 5(1), 33-42.
10. Siddiqui, T. (2014). Impact of In-Service Teachers Trainings- A Study of Four Districts in Uttar Pradesh. Indian Journal of Research, Vol. 3 (1), 81-83.
11. Singh, D. (2013). Impact of In-Service Teacher Training Program under SSA in Educational Block of District Bhojpur. International Journal of Arts Commerce & Literature, Vol 1 (11), 441-450.
12. Srivastava, P.G.N. (2003). A study of academics and pedagogical requirements for quality education at elementary stage. Studies on Researches in Indicators of Quality education at elementary stage. NCERT, New Delhi.
13. Yadav, B., Bhardwaj, P. (2013). Impact of In-service Teacher Education Programs on Class Room Transactions. Educationia Confab, Vol. 2(6), 8-16.
14. Yadav, S.K. (2012). Impact of in-service teacher training on classroom transaction. INSET Training center- A Microview, NCERT New Delhi.