

Impact of In-service Teacher Training on Classroom Transaction

SSA INSET Packages in States: An Assessment

Principal Investigator

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2012



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FOREWORD

Quality school education requires teachers of quality. The world that teachers are preparing children to enter is changing rapidly, and the teaching skills required need to evolve likewise. No pre-service course of teacher education can be sufficient to prepare a teacher for her whole career of 30 or 40 years. Thus, in-service teacher education is an essential process by which teachers (like other professionals) keep themselves up to date. Realising this need, the *Sarva Shiksha Abhiyan* guidelines provide for in-service training (INSET). The study entitled *Study of Impact of In-service Teacher Training under SSA on Classroom Transaction*, though covering only the twenty-day training programme, is much needed.

An assessment of the training packages used by different states, in terms of quality and relevance to the school curriculum, especially NCF-2005, was carried out by experts in the states sampled for the study. The essence of this study is presented in this document. It is expected that the analysis done here will be useful for redesigning the continuous professional development packages for teachers of elementary schools. Professor S.K.Yadav, Principal Investigator, and his team have created a series of very useful reports based on the comprehensive study undertaken, of which this is the fourth report. It is hoped that this thematic report will be of interest to the professionals involved in developing and evaluating the training packages across India and elsewhere.

PARVIN SINCLAIR

Director

National Council of Educational
Research and Training

New Delhi
May 2012

PREFACE

The flagship scheme of Sarva Shiksha Abhiyan (SSA) was initiated during 2000-01 for improving the quality of elementary education and also to achieve the constitutional commitment of Universalisation of Elementary Education. Teacher Training was one of the important components of SSA for achieving the goal of UEE. The provision for 20 days in-service training was made for all the elementary school teachers every year under this scheme for their professional growth and development. Since this programme was being implemented in the country for over a decade, it became necessary to evaluate the scheme for addressing its impact in classroom transaction and on students. This compendium *SSA INSET Training packages in States: An Assessment*, provides an analytic view of the state reports prepared by experts.

I am indebted to experts and several others who extended unqualified support for finalisation of the guidelines for content analysis of the training packages. I am grateful to Professor Parvin Sinclair, Director, NCERT and Professor B.K.Tripathi, Joint Director for providing suggestions and guidance from time to time.

My thanks are due to Professor N.K. Jangira, Former Head, DTEE and Dean (C) and Professor Saroj Bala Yadav, Head DESS, NCERT for extending continuous professional support for the construction and finalisation of tools of study. I appreciate the efforts made by Dr Vijayan K and Dr J K Patidar, Assistant Professors for completing this task.

New Delhi
May 2012

S.K. Yadav
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ABBREVIATIONS

ABL	Activity Based Learning
ALM	Activity Learning Material
APEP	Andhra Pradesh Education Project
B.Ed.	Bachelor of Education
BEEO	Block Elementary Education Officer
BEO	Block Education Officer
BEP	Bihar Education Project
BRC	Block Resource Centre
BRCC	Block Resource Centre Coordinator
BRCF	Block Resource Centre Facilitators
BRG	Block Resource Group
CARP	Committee of Approval for Research Projects
CBSE	Central Board of Secondary Education
CCE	Continuous and Comprehensive Evaluation
CPD	Continuing Professional Development
CRC	Cluster Resource Centre
CRCC	Cluster Resource Centre Coordinator
CRCF	Cluster Resource Centre Facilitators
CRG	Cluster Resource Group
CRP	Cluster Resource Person
CRTE	Cluster Resource Teacher Educator
CT	Classroom Transaction
CTE	College of Teacher Education
CWSN	Children with Special Needs
D.Ed.	Diploma in Education
DEO	District Education Officer
DEP-SSA	Distance Education Programme-Sarva Shiksha Abhiyan
DIET	District Institute of Education and Training
DISE	District Information System for Education
DPEP	District Primary Education Programme
DPO	District Project Officer
DPR	Detailed Project Report
DRG	District Resource Group

DTEE	Department of Teacher Education and Extension
Ed. CIL	Educational Consultants India Limited
EVS	Environmental Science
FGD	Focus Group Discussion
FI	Field Investigator
IASE	Institute of Advanced Studies in Education
ICT	Information and Communication Technology
IED	Integrated Education for Disabled
IGNOU	Indira Gandhi National Open University
INSET	Inservice Education for Teachers
LEHAR	Learning Enhancement Activities in Rajasthan
LIP	Language Improvement Programme
LJ	Lok Jumbish
M. Ed.	Master of Education
MAAP	Mathematical Abilities Acquisition Programme
MDM	Mid Day Meal
MHRD	Ministry of Human Resource Development
MRC	Mandal Resource Centre
MS	Mahilya Samakhya
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NCFTE	National Curriculum Framework for Teacher Education
NCTE	National Council for Teacher Education
NPE	National Policy on Education
NPRC	Nayaya Panchayat Resource Centre
OBB	Operation Black Board
OBC	Other Backward Classes
OHP	Over Head Projector
OPEPA	Odisha Primary Education Programme Authority
PASS	Programme for Acquisition of Social Skills
Ph. D.	Doctor of Philosophy
PMOST	Programme of Mass Orientation for School Teachers
RIE	Regional Institute of Education
RIESI	Regional Institute of English for South India
RP	Resource Person
RTE	Right to Education
RVM	Rajiv Vidya Mission
SALM	Simplified Activity Learning Material

SC	Scheduled Caste
SCERT	State Council of Educational Research and Training
SIE	State Institute of Education
SKP	Shiksha Karmi Project
SOPT	Special Orientation for School Teachers
SPD	State Project Director
SPO	State Project Office
SRG	State Resource Group
SSA	Sarva Shiksha Abhiyan
ST	Scheduled Tribes
STEP	Science Through Experiments and Project
TC	Training Centre
TLE	Teaching Learning Equipment
TLM	Teaching Learning Material
TNA	Training Need Assessment
TT	Training Transaction
UEE	Universalisation of Elementary Education
UNICEF	United Nations International Children's Emergency Fund
UP	Upper Primary
UPBEP	Uttar Pradesh Basic Education Project
USA	United States of America

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1

Study Context

The Focus

SSA Framework 2001 (revised in 2008 and 2011) made a provision for 20-day training (10-day block training at BRC and follow on training in 10 monthly meetings at CRC) under Inservice Education for Teachers (INSET) for all primary and upper primary school teachers every year for improving the quality of elementary education. The quality of INSET depends, among other things, on the quality of the training package and its transaction. The training transaction impacts teachers in terms of their perceptions about training and learning achievement of teachers and students. MHRD entrusted the study of INSET impact on classroom transaction to NCERT. One of the objectives of the study pertains to assessment of the training packages used for INSET during the last three years, especially 2010-11, in the sampled states.

Training packages are developed by the states year after year keeping in view the identified training needs. The demand side training needs are systematically assessed through interaction with the teachers and the feedback provided by the supervisors. Training Need Assessment (TNA) spearheads the development of the training package. Education reform initiatives and innovation diffusion representing the supply side needs are also accommodated in the package. Sometimes training packages are

devoted exclusively for both. If there is limited demand or supply side needs, proportionate mix is to be according to the priority of these determinants at a particular point of time. For example, RTE Act, implementation of NCF-2005 and inclusive education of CWSN represent supply side needs in SSA INSET.

The major concern at the moment is implementation of the NCF-2005 which is considered a major school curriculum reform initiative as a part of SSA. It was, therefore, considered essential to assess the training packages in terms of addressing the supply related demand and the TNA of teachers. It was also assessed as to how training packages had developed over a period of three years 2008-09, 2009-10 and 2010-11. The 2010-11 packages received special attention since its transaction formed core of the study. The assessment covered presentation of the content and methodology of its transaction in the training package.

Methodology

Guidelines for assessing the training package used for INSET 2010-11 were developed by the national team at NCERT. The guidelines covered information about the age of the central theme, theme of the modules or units, the agency involved in its development, alignment with the SSA Guidelines 2008,

changes over the three-year period covered by the study, and appraisal of the constituent components. Overall quality of the package in respect of conformity with objectives, caste and gender bias, sequential treatment of the content, adequacy of elaboration of the concept covered, appropriate illustrations, simple and easy to understand language, encouraging activity based teaching, arousing and sustaining interest of trainees, appropriateness of the suggested transactional methodology, sectional review in modules, review exercises at the end, activities for tackling learning difficulties of children, suggesting readings and follow up activities to reinforce learning were rated by the experts group in the light of the desk analysis.

Each state coordinator identified a team of four to five curriculum and teacher education experts. A committee of experts was invited for a three-day workshop for the assessment and appraisal of the training package. At least one member of the national team was also a participant observer in this evaluation workshop in most of the states. This chapter provides the outcome of this exercise.

Composition of the Packages Assessed

The states developed training packages separately for primary and upper primary teachers. In some states the packages were combined for both. Figure 1.1 provides state-wise information about the target group addressed by the training packages for 2010-11.

Ten states prepared separate training packages for primary and upper primary teachers. The states of Haryana, Jammu and Kashmir, Maharashtra, Madhya Pradesh and Nagaland packages addressed both primary and upper primary stages.

The combined training package for primary and upper primary school teachers was prepared in Haryana as the SSA Coordinator informed that teachers had received sufficient subject specific training. They were not motivated enough to attend the same type of the training programme. The INSET was held in abeyance for two years in 2008 and 2009. In 2010, the state decided that training should be motivational aiming at attitudinal change. General training for both primary and upper

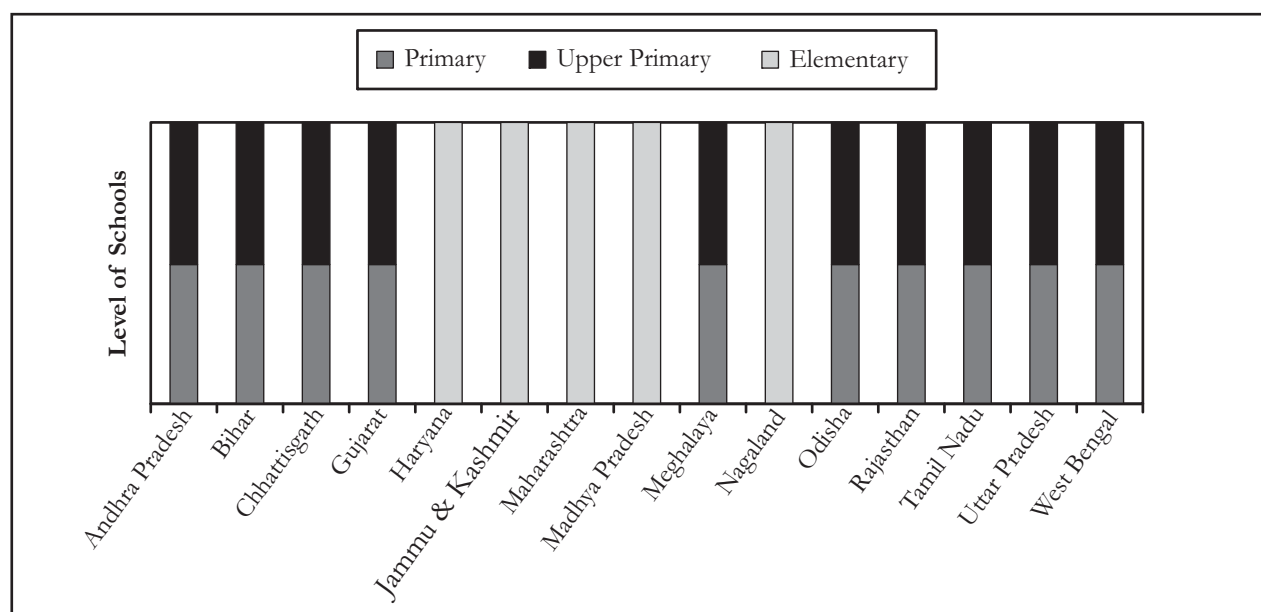


Figure 1.1: Training packages prepared for different states

primary school teachers along with development of the training package was, therefore, outsourced to two private companies, Educomp Solutions and New Horizon India Ltd.

In the states of Jammu and Kashmir and Nagaland, combined training of primary and upper primary school teachers was the practice since most of the teachers taught classes at both stages of elementary education in schools. Even multigrade teaching was reported at both levels. In Maharashtra, value based training, *Jeewan Vidhya*, was considered relevant for primary as well as upper primary school teachers. The training needs in these states reflected system perceived needs rather than expressed needs of teachers arising out of TNA. It is not yet clear as to how specific

needs of primary and upper primary teachers related to subject teaching were addressed by the SPO, SSA.

SSA INSET Guidelines

The assessment is based on the SSA 2008 guidelines for INSET. For ready reference the SSA guidelines given below were provided to the experts' group.

This chapter focused on the need for the assessment of the training packages in the 15 participating states and objectives of assessment. The methodology followed for the assessment was also outlined. The next chapter summarises the analytic exercise.

SSA INSET Guidelines

- (a) It takes into account the constructivist approach as laid down in NCF-2005. This means that the teacher should act as 'facilitator' and should work towards creating a variety of learning experiences in and out of the classroom that enable children to construct knowledge from activities and experiences in day-to-day life. The teacher is not to be a 'transmitter' of knowledge to passive recipients (the children).
- (b) This approach requires being reflective, that is teachers need to become mindful enquirers into their own experiences, to guide children meaningfully.
- (c) The guidelines advocate a 'split up' model of in-service training, in which 6 to 8-day training is provided at the BRC/DIET level and 2-day training through actual observation of the classroom situations. Thereafter, teachers are expected to return to their school settings for 2-3 months, to try out the recommended methodologies and ideas. At the end of the training programme, they once again return to the BRC/DIET for two days to share their experiences and reflect on the new ideas before they complete the training.
- (d) The guidelines recommend a format training duration of 10 days, as evident from above.
- (e) In keeping with NCF-2005, the guidelines recommend training of teachers in areas such as art and heritage crafts, health and physical education, work education and education for peace, besides training in basic subjects like language, EVS and Mathematics.
- (f) The guidelines stress identification of training needs and development of appropriate training modules through BRGs/DRGs/SRGs. It is also recommended that the training design should emphasise local contextuality and specificities in the teaching learning situation.
- (g) A list of suggested readings, educational audio and video programmes for teachers have also been provided in the guidelines.

2

INSET Training Package: Analytic Highlights

Assessment Dimensions

The dimensions of assessment of the training package covered development of the training package; format and content; the agency that developed the package; consonance with the NCF-2005 and INSET Guidelines 2008 and overall quality of the package in respect of conformity with objectives, caste and gender bias, sequential treatment of the content, adequacy of elaboration of the concept covered, appropriate illustrations, simple and easy to understand language, encouraging activity based teaching, arousing and sustaining interest of trainees, appropriateness of the suggested transactional

methodology, sectional review in modules, review exercises at the end, activities for tackling learning difficulties of children, suggesting readings and follow up activities to reinforce learning.

Development of the Training Packages

INSET training is managed and funded by the SPD in the states. The services of the institutions, agencies and private companies can be mobilised for preparing training packages. The practice varies from state to state. Tables 2.1, 2.2 and 2.3 provide information about the training package for INSET 2010-11, agency that developed it and the year in which training packages were developed.

Table 2.1
Development of the Training Package for Primary Stage

<i>Name of the State</i>	<i>Title of the Training Package used in 2010-11</i>	<i>Agency(s) that developed the package</i>	<i>Publication Year</i>
Andhra Pradesh	- Learning Enhancement Programme (LEP): Telugu, Mathematics, EVS, English <i>Snehbala</i>: Environmental Studies Cards (SLIM)	Rajiv Vidya Mission	2009-2010
Bihar	<i>Bodhi Sambad Bhag-I (Classes III-V)</i>: The package has comprehensive subjects like Language, Mathematics, EVS along with Art Education. The package includes content, process and assessment along with Classroom Management	BEPC	2009-2010
Chhattisgarh	<i>Shikshak Prashiksan Sandarshika</i>: English, Mathematics and General Issues like Enrolment and Retention, Learning and Knowledge, SSA, Concept of area	SCERT	2010-2011

Gujarat	Gujarati, Environment and Maths: Content and method· Activity Based Learning (<i>Pragna</i>), Teaching Learning Process, CCE Plan, TLM and Puppet, School administration, planning and organization, IED, Gender education, ADEPTS, ERAC (Experience Reflection Application and Consolidation), Time Management	SPO, SSA	2009-2010
Meghalaya	An orientation on active learning, Teaching on – EVS, Mathematics and English, Art and Craft, Practice Teaching	DERT and DIET	2010
Odisha	<i>Anwesana-I</i>(Science): Objective of Scientific Learning, Project work, Food, Water and Diseases, Earth and Space <i>Sambhar-I</i>(Mathematics): Numbers, Factors and Multiples, Division, Common Fraction, etc.	SSA, Odisha	2009-2010
Rajasthan	<i>LEHAR</i>(Learning Enhancement Activity in Rajasthan) for Class-I and II: Hindi, English and Mathematics	REEC, SSA	2010
Tamil Nadu	Simplified Activity Based Learning Method (SALM), IED Training, SALM Reinforcement, Training (All subjects), Science Experiments Training	SCERT/SPD	2010-2011
Uttar Pradesh	- English: Characteristics of English Language, Development of English Language, Teaching of Structure - Reading ability (Hindi) and Numeric Ability (Mathematics): Concept of Language, Reading writing and its development, concept of 'less and more', 'one and many', 'big and small'	English Language Teaching Institute, Allahabad SPO, Lucknow	2009-2010
West Bengal	English Class-III (My English Book), Mathematics (<i>Naba Ganiti Mukul</i>), Curriculum and Syllabus	WBBSE	2010

Table 2.2

Development of the Training Package for Upper Primary Stage

<i>Name of the State</i>	<i>Title of the Training Package used in 2010-11</i>	<i>Agency(s) that developed the package</i>	<i>Publication Year</i>
Andhra Pradesh	- Success Schools* Teaching Learning Process: Mathematics, Science Social Studies and Languages (English, Hindi and Telugu- Common) {English medium based on CBSE Syllabus} - General Schools Language Improvement Programme (LIP): Telugu, English and Hindi, Science Through Experiments and Projects (STEP), Mathematical Abilities Acquisitions Programme (MAAP), Programme for Acquisition of Social Studies (PASS)	Rajiv Vidya Mission	2009-2010 2010-2011
Bihar	<i>Bodhi Bhaskar</i> (Mathematics): Knowing Numbers, Algebraic terms, Number Game, Fraction, etc· <i>Bodhi Bhaskar</i> (Science): Metabolism in Plants, Water, Air and its Pollution, Acid, Base and Salts <i>Putanjali</i> : Yoga Training	BEPC	2010-2011

Chhattisgarh	• <i>Shikshak Prashikshan Sandarshika: Angrezi, Ganit, Vigyan aur Samanya Muddey</i> like Meaning of Map and its History, Latitude and Longitude, Health and Food, Effective Communication • Some of the modules were developed by the external organizations whose support was taken for the training. For example, AV Aids	SCERT Franklin Covey Company	2010-2011 2010-2011
Gujarat **	• Gujarati, Environment, Maths: Content and method (Classes V –VIII) • Activity Based Learning (<i>Pragna</i>) (Classes V–VIII), Teacher Learning Process (Classes V–VIII), CCE Plan (Classes V–VIII), TLM and Puppet (Classes. V–VIII), School administration, planning and organization, IED, Gender education, ADEPTS, ERAC (Experience Reflection Application and Consolidation), Time Management, etc (Classes V–VIII)	SPO, SSA	2009-2010
Meghalaya	• Source Material for Upper Primary Teacher s: Teaching of English, Social Studies, Science and Mathematics	DERT and DIET	2010
Odisha	• <i>Amvesana-II</i> (Science): Questionnaire preparation and presentation–Air and Weather, Living, Non-living and Aquatic life, etc • <i>Sambhav-II</i> (Mathematics): Brackets and Natural numbers, Integers, Rational numbers, Angle, Circle	SSA, Odisha	2009-2010
Rajasthan	• Use of Science and Mathematics Kit	REEC	2010-2011
Tamil Nadu	• Middle School Development Programme (Master Trainer Participants Worksheets) English Language: The area covered are skill of Writing, Thinking, Error correction, Dictation, Creative and Critical thinking	SSA and British Council	2010-2011
Uttar Pradesh	• English: Development of English language skills, Peculiarities of English language, Teaching of prose, poetry, composition and structure is explained with model lesson plan • Mathematics (<i>Karke Sikhe Ganit</i>): 23 hands on activity based on hard sports of mathematics are explained in practice oriented style. • Science (<i>Karke Sikhe Vigyan</i>): Our surroundings, Suppression of substances, Measurement, Speed, etc.	English Language Teaching Institute, Allahabad SPO Lucknow SPO Lucknow	2009-2010 2009-2010 2009-2010
West Bengal	• Framing of Evaluation Papers/Revision of Tools, “Project based activities in Mathematics, Science (Physical and Life Science) and Social Studies (History and Geography) • NCF	WBBSE	2009-2010

Note

* Success Schools were set up by Government of Andhra Pradesh vide G.O.Ms. No. 76, Education (SE Trg) Department, Dt. 10/06/2008 with English Medium and CBSE/State Syllabus.

** Gujarat has lower primary training of all the primary teachers in general training subjects in the year 2010-2011 but in 2011-2012 the combined training of Classes I-VIII in general subjects but content based training in separate subjects for lower primary.

Table 2.1 provides information regarding training packages for primary school teachers. The packages included modules in some states and in some other states teachers' handbooks/guides, for example, English in Chhattisgarh. The Bihar package addressed the training of teachers of Classes III-V. Training packages in some states (Gujarat, Meghalaya) covered general areas of training with assorted themes/topics while the other states covered different teaching subjects of Science and Mathematics in the states of Odisha, Tamil Nadu, Uttar Pradesh and West Bengal. The most comprehensive coverage was found in Tamil Nadu. Teachings of all subjects in Classes I-V were covered. Odisha also provided special input for multigrade teaching. Revised package in Gujarat included RTE on teachers' demand.

The packages developed earlier were revised for INSET during 2010-11 in most of the states. The training packages for primary school teachers were got developed by SPDs from different sources. In the states of Bihar, Gujarat, Rajasthan and Tamil Nadu SPO developed the training package with the involvement of SCERTs. Odisha Primary Education Project Authority prepared the training package while private companies were involved in this exercise in Chhattisgarh along with IGNOU. British Council was involved in preparing the package for the teaching of English in the state of Tamil Nadu.

As is evident from Table 2.2 the exclusive training packages for the upper primary school teachers in the ten states focused on the teaching of subjects. Bihar introduced training of yoga. Andhra Pradesh and Tamil Nadu continued the focus on quality through activity-based approach including experiments and project work in schools. The agencies involved in preparing the training packages were mostly the same as for primary school teachers mentioned above except for the addition of Regional Institute of English for South India, Bangalore.

Five states had developed combined training packages for both primary and upper primary teachers. In Haryana INSET was discontinued and restarted in 2010-11 after a gap of two years to revitalise it by introducing general training in place of repetitive 'hot spot' based training. The state identified 14 themes relating to learning and teaching covered and outsourced them including development of the training package to two private companies. Jammu and Kashmir, Madhya Pradesh, Maharashtra and Nagaland covered general pedagogical issues in their combined packages for the elementary stage. The point about the combined package is not clear as there was no basis for covering more general issues in the training.

Changes in the Content of Training Package

Overall, change in content areas in the package for 2010-11 used in 2008-09 and 2009-10, was noticed in the state reviews. At the primary stage, the training package included some new areas like art and heritage, health and physical education, work education and peace education, multigrade teaching (Andhra Pradesh); art education, classroom management (Bihar), school hygiene and child cabinet, disaster management, pupils evaluation and teachers motivation (West Bengal). In some states, training package was revised with particular reference to activity based teaching-learning process as recommended under NCF-2005 and SSA Framework 2008. Project based approach was focused in Rajasthan (LEHAR-Learning Enhancement Activity in Rajasthan) for Classes I and II. Similarly, Odisha stressed training in Science and Mathematics. General issues such as RTE, inclusive education, right to learn, comprehensive and continuous evaluation also found a place in 2010-11 training packages in several states.

Table 2.3
Development of the Training Package for Elementary Stage

<i>Name of the State</i>	<i>Title of the Training Package used in 2010-11</i>	<i>Agency(s) that developed the package</i>	<i>Publication Year</i>
Haryana	• <i>Shiksha Prashikshan Programme</i>: Sensitization of Teachers, Child Psychology, Methods of Teaching, Assessment and Evaluation, Continuous and Comprehensive Evaluation, Use of Technology in Education	Educomp Solutions Ltd	2010-11
	• <i>Prashikshan Pustika</i>: Sensitization of Teachers, Motivation of teachers. Education Technology, Child Psychology, Role of parents and community in the education, Identification of CWSN (Children with Special Needs) and teaching according to their levels and needs, Use of ICT (Information and Communication Techniques) in Education and evaluation, Stress management techniques, Classroom Skills and Process includes discussion on teaching learning strategies, Lesson Planning and Assessment, Methods of teaching include Micro-Teaching techniques (Lecture, Discussion, Demonstration, Practice and Feedback), Evaluation and discusses CCE, Guidance and Counselling, Personality development	New Horizon India Ltd.	2010-11
Jammu and Kashmir	• Inclusive Education, Community Mobilization, Disaster Management, Leadership Learning Disabilities, Right to Education (RTE), Right to Information Act, Health Disorders to School Children, Multigrade Teaching Heritage Education, Peace Education and Vocational education, Subject Modules, Language Teaching (English), Language Teaching (Urdu), Pedagogy of Kashmiri, Pedagogy of Mathematics	SIE, Jammu and SIE, Srinagar	2009-10
Maharashtra	• <i>Jeewan Vidhya Part-I and II</i> (Marathi Version): An introduction to <i>Jeewan Vidhya</i>, Structure of life, Questions and Answers related to <i>Jeewan Vidhya</i>	Jeewan Vidhya Prakashan, Shri Bhajanashnam, Amarkantak	2008
Madhya Pradesh	<i>Samarthya</i> • Part- I: Multistage teaching, what, how, why TLM?, Examination and evaluation, SSA, Inclusive Education, Activity Learning Method, Activity Based Learning • Part-II: What, why, how activities?, Utility of Teaching Material, What is Evaluation, Example of Activities (according to subjects and classes)	MPSEC	2010
Nagaland	• Thematic Papers and Sessions Plans for the Mass Teachers' Training Programme is meant for Classes I to IV covering 10 thematic areas, viz. New Pedagogy, Psychology, EVS (Environmental Study), Language (English) Mathematics, Management, TLM, Evaluation, Planning, Community Participation	SCERT in collaboration with UNICEF	2002-03

For the upper primary stage, each state developed a specific training package keeping in view the need assessment of teachers and pedagogical concerns. For example, training packages in the state of Andhra Pradesh catered to teachers in English medium success schools following CBSE syllabus and general schools following State Board Syllabus. Language Improvement Programme (LIP) – Telugu, English and Hindi; science through experiments and projects (STEP); mathematical abilities acquisition programme (MAAP); programme for acquisition of social skills (PASS). In Bihar the training package covered only three subject areas of science, maths and yoga training. In Chhattisgarh training package addressed English teaching. The State of Gujarat focused on modules on Right to Education (RTE) and to follow ADEPT. In Odisha, the focus was on the teaching of science and mathematics. In Rajasthan, the training package centred around the NCERT-produced science and mathematics kits introduced in schools, whereas Uttar Pradesh package featured training in English, science and mathematics. West Bengal developed new modules such as disaster management (9 modules): training package on teacher's handbook on cleanliness, student council and disaster management; training packages on preparation of competency based continuous and comprehensive evaluation for physical and life sciences (10 modules); art of framing evaluation papers in English (8 units); corporal punishment (12 modules); *shikshan sabayika* (Bengali); CCE and grading (5 modules); constructivist approach in classroom teaching-learning curriculum transaction and evaluation in the light of NCF-2005 and awareness on safe traffic.

Common training packages for both primary and upper primary schools were revised to meet the emerging needs. In Nagaland, no training package was developed in 2010-11. The state was still using the training package developed in

2003. In Haryana, Jammu and Kashmir, Madhya Pradesh and Maharashtra, the training packages had 'general themes' covering some concerns as reflected in RTE Act (2009) focusing on pedagogical approach. New areas like art and heritage, health and physical education, work education and peace education were also included in the training packages.

Content analysis further revealed that the objectives of the training package were indicated either in the preface of the module or in the introductory chapter of the training package. However, objectives were not explicitly spelt out in the training package for Bihar and Chhattisgarh. Activity based learning and interactive modalities were built in the training package to some extent but there was no separate statement about the transaction modalities as such. In some of the states programme schedule was indicated and further instruction by SPD office was given to follow this programme schedule. But, the recommendation of split up model as envisaged in the SSA Framework 2008, was not followed.

To What Extent were the Training Packages Aligned to SSA 2008 Guidelines?

- *Constructivist approach to teaching as advocated in NCF-2005:* Constructivist approach *per se* was not addressed in the training package. However, activity based approach having some elements of constructive approach was evident in the training packages in the states of Andhra Pradesh, Bihar, Gujarat, Rajasthan and Tamil Nadu. Though minimal, a few examples were noticed in the training packages of Chhattisgarh, Odisha, West Bengal and Uttar Pradesh. However, in other states like Meghalaya, Haryana, Madhya Pradesh and Nagaland, modules did not provide any indication of using this approach.

- *Reflective teacher to guide students constructing knowledge:* This approach was not found to permeate the training packages. However, some glimpses were noticed in the project based packages such as STEP in Andhra Pradesh, LEHAR in Rajasthan, 'experiments' in Tamil Nadu and social projects in Gujarat.
- *Spilt up model of in-service training:* The 'split up model' as envisaged in SSA Framework (2008) was not used in the states. However, the states follow their own model due to state specific considerations. Haryana divided training in two phases of seven days each. Madhya Pradesh provided training for 8 days, Maharashtra for 8 to 9 days, and Nagaland organized 10-day training in two phases of 5 days each.
- *Special focus curricular areas covered:* In addition to the basic subjects, art and heritage crafts, health and physical education, work education and education for peace were recommended in the NCF-2005. These need to be included in the INSET package as well. Analysis of the training packages revealed that these areas were not included except in Andhra Pradesh and Jammu and Kashmir (Peace and Heritage).
- *Identification of training needs and emphasis on local context and specificities:* In Gujarat, systematic TNA was carried out. Training packages in the states of Uttar Pradesh and Nagaland were not based on training needs assessment. In other states also, the training packages reflected predominant flavour of supply related content and, to that extent, training needs assessment or feedback from teachers were used in a small measure.
- *Reference to readings and audio-video programmes:* These were conspicuous by their absence in most of the states.

It is evident that RTE Act, revised SSA Framework 2011, new schemes to be availed by children with special needs, changes in curriculum and textbooks and continuous comprehensive evaluation found a place in the training packages. The decision, however, should be based on consultation with all stakeholders, especially the user, the teacher. Training needs assessment should form an essential component of this decision making. Top down approach needs to be replaced by bottom up assessment modality. The INSET should not only improve skills of teachers but also stimulate them for innovation through reflective classroom transaction. The training packages should induct futurist areas like digital literacy, multiple intelligences, communication skill and productivity. Population education; role of teacher education and adolescence education also need to be included. Inclusive education for CWSN too needs to be covered. One important missing element in the training packages was the concept of multiple intelligences and how teachers can use it to enrich learning achievement of children according to their strength in each component with excellence in the dominant ones.

Assessment of Overall Quality of Training Package

To ascertain the overall quality of the training package, experts were required to rate on a three-point scale on the identified parameters, namely, agreement with the objectives, caste and gender bias, sequential treatment, adequacy of treatment of the concept, appropriateness of illustrations, simple and easy to understand language, encouraging activity based learning, arousing interest of the teachers, sectional review in the modules, review exercises at the end, tackling learning difficulties of children, suggested readings and follow on activities for reinforcement of learning. The three points for rating were 3

for 'to a large extent', 2 for 'to some extent', 1 for 'very little or not at all'. Training packages for three years 2008-09, 2009-10 and 2010-11 were rated by the experts.

Table 2.4 provides ratings in respect of the quality of the 14 parameters relating to the training package for primary school teachers in the 10 states that prepared a separate package for teachers, Table 2.5 for training upper primary school teachers and Table 2.6 for the common training packages prepared for both primary and upper primary school teachers. The tables are dimensional, columns specify the states and the parameters while rows specify the year for which the training package is intended.

Agreement with the objectives of the modules: The states of Andhra Pradesh and Gujarat were consistently in agreement with the objectives in the training package for primary school teachers. Tamil Nadu and West Bengal were also consistent but still had scope for improvement. In Meghalaya the rating was the lowest. It was a cause of concern while in other states there is noticeable improvement over the period of three years. Training package for upper primary school teachers indicated similar findings. In the common package for primary and upper primary school teachers either objectives were not specified (Haryana and Nagaland) or there was enough scope for improvement (Jammu and Kashmir and Madhya Pradesh).

No caste and gender bias in the modules: Content in all training packages in the states did not reflect caste and gender bias except in Uttar Pradesh, which had scope for improvement. The training materials in this state do not indicate corrective action in this respect over the last three years.

Sequential treatment of the content: The training packages for primary school teachers for Bihar and West Bengal received the lowest rating while

the remaining states except Rajasthan, Tamil Nadu and Rajasthan had scope for improvement. The quality improvement on this parameter was rather slow over the three-year period under study. The issue of sequence can, however, be questioned in the context of NCF-2005 since constructivist approach and reflective teachers require quite a bit of flexibility in constructing knowledge. Similar finding was noticed in the states with common training package for both levels of teachers. About 56 per cent teachers reported that there was no sequential presentation in the training module.

Concept dealt with adequately: Training package for primary school teachers in respect of this parameter was rated the lowest for Meghalaya and Rajasthan while it received the highest rating in Tamil Nadu, Andhra Pradesh, Bihar and Uttar Pradesh. Other states had scope for improvement.

Appropriateness of illustrations: Illustrations emerged as the weakest training package quality parameter in terms of rating by the experts in respect of all the three target groups. Little improvement was noticed over the three-year period studied. There could be several reasons for this state of affairs. Maybe, the cost considerations led to inappropriate illustrations. Maybe genuine artists did not care due to poor compensation. It is also possible that briefing of the artists by the package developers was not appropriate. Both might be economising time at the cost of quality of illustrations. The cause could be different in different states.

Use of simple and easy to understand language: According to rating of this component the quality of language used in the training packages showed improvement over time in most of the states except in the states of Bihar, Odisha, Rajasthan and Uttar Pradesh where there was scope for improvement. Rating for Meghalaya package was the lowest.

Table 2.4
Experts' Rating of the Training Package Related to Quality Parameters for
Primary School Teachers

<i>Areas</i>	<i>Year</i>	<i>States</i>									
		<i>AP</i>	<i>BR</i>	<i>CG</i>	<i>GJ</i>	<i>ML</i>	<i>OR</i>	<i>RJ</i>	<i>TN</i>	<i>UP</i>	<i>WB</i>
Agreement with objectives	2009	3	1	1	3	NA	NA	2	2	1	2
	2010	3	3	1	3	NA	NA	3	2	3	2
	2011	3	3	2	3	1	3	3	2	3	2
No Caste and gender bias	2009	3	2	2	3	NA	NA	3	3	2	1
	2010	3	3	2	3	NA	NA	3	3	2	3
	2011	3	3	3	3	1	3	3	3	2	3
Sequential Treatment	2009	3	2	2	2	NA	NA	2	2	1	1
	2010	3	1	2	2	NA	NA	3	3	3	1
	2011	2	1	2	2	2	2	3	3	3	1
Concept dealt was adequate	2009	2	2	2	1	NA	NA	2	2	1	2
	2010	2	3	2	2	NA	NA	1	2	3	2
	2011	3	3	2	2	1	2	1	3	3	2
Appropriate Illustrations	2009	2	1	2	1	NA	NA	1	2	2	3
	2010	2	3	2	1	NA	NA	1	2	1	3
	2011	2	3	2	2	1	1	1	2	1	2
Simple and easy to understand language	2009	3	2	2	2	NA	NA	2	2	2	3
	2010	3	2	2	2	NA	NA	2	3	3	3
	2011	3	2	3	3	2	3	2	3	3	3
Encourage activity based teaching	2009	3	2	2	2	NA	NA	2	3	2	3
	2010	3	3	3	2	NA	NA	2	3	3	3
	2011	3	3	3	3	1	1	3	3	3	2
Arouse and sustain interests of trainees	2009	2	3	1	2	NA	NA	2	2	1	2
	2010	3	2	2	2	NA	NA	2	2	2	2
	2011	3	2	2	2	1	1	2	2	2	1
Appropriate transactional methodology	2009	3	3	3	1	NA	NA	2	2	1	3
	2010	3	3	3	2	NA	NA	2	2	2	3
	2011	3	3	3	2	2	3	2	2	2	3
Sectional review in modules	2009	1	1	1	1	NA	NA	1	2	1	1
	2010	1	3	2	1	NA	NA	1	2	1	1
	2011	2	3	1	2	1	1	1	2	1	1
Review exercises at the end	2009	1	1	1	3	NA	NA	1	2	2	2
	2010	1	3	1	2	NA	NA	1	2	3	2
	2011	1	3	1	3	1	1	1	2	3	1
Activities for tackling learning difficulties of children	2009	2	1	2	1	NA	NA	1	1	1	1
	2010	2	1	2	1	NA	NA	1	1	1	1
	2011	3	1	2	2	1	1	1	1	1	1
Suggested Readings	2009	1	1	1	1	NA	NA	1	1	1	1
	2010	1	3	1	2	NA	NA	1	2	1	1
	2011	1	3	1	3	1	1	1	2	1	1
Follow up activities to reinforce learning	2009	1	1	1	1	NA	NA	2	1	1	2
	2010	2	2	1	1	NA	NA	2	1	2	2
	2011	2	2	2	2	2	1	2	2	2	2

Table 2.5
Expert's Rating of the Training Package Related to Quality Parameters for
Upper Primary School Teachers

<i>Areas</i>	<i>Year</i>	<i>States</i>									
		<i>AP</i>	<i>BR</i>	<i>CG</i>	<i>GJ</i>	<i>ML</i>	<i>OR</i>	<i>RJ</i>	<i>TN</i>	<i>UP</i>	<i>WB</i>
Agreement with objectives	2009	NA	3	1	3	NA	NA	2	3	1	NA
	2010	3	3	1	3	NA	NA	2	3	3	3
	2011	3	2	2	3	1	2	3	3	3	1
No caste and gender bias	2009	NA	3	2	2	NA	NA	3	3	2	NA
	2010	3	3	2	2	NA	NA	3	3	2	3
	2011	3	3	3	2	1	3	3	3	2	3
Sequential treatment	2009	NA	3	2	1	NA	NA	3	2	1	NA
	2010	3	3	2	1	NA	NA	3	2	3	3
	2011	3	3	2	2	2	2	3	3	3	3
Concept dealt was adequate	2009	NA	2	2	1	NA	NA	2	2	1	NA
	2010	2	2	2	1	NA	NA	2	3	3	3
	2011	2	2	2	2	1	2	2	3	3	1
Appropriate illustrations	2009	NA	2	2	1	NA	NA	2	2	2	NA
	2010	3	2	2	1	NA	NA	2	2	3	3
	2011	3	1	2	2	1	1	2	2	3	1
Simple and easy to understand language	2009	NA	3	2	2	NA	NA	2	3	2	NA
	2010	3	3	2	2	NA	NA	3	3	2	3
	2011	3	3	3	3	2	3	3	3	2	3
Encourage activity based teaching	2009	NA	3	2	1	NA	NA	2	3	2	NA
	2010	3	2	3	2	NA	NA	3	3	3	1
	2011	3	2	3	3	1	1	3	3	3	3
Arouse and sustain interests of trainees	2009	NA	2	1	2	NA	NA	2	3	1	NA
	2010	3	3	2	2	NA	NA	3	3	3	1
	2011	2	1	2	2	1	1	2	3	3	3
Appropriate transactional methodology	2009	NA	3	3	1	NA	NA	2	2	1	NA
	2010	2	2	3	2	NA	NA	2	2	2	1
	2011	2	1	3	2	2	3	3	2	2	1
Sectional review in modules	2009	NA	1	1	1	NA	NA	2	2	1	NA
	2010	3	1	2	1	NA	NA	2	2	1	1
	2011	3	1	1	2	1	1	3	2	1	1
Review exercises at the end	2009	NA	1	1	2	NA	NA	2	2	2	NA
	2010	3	1	1	2	NA	NA	2	2	3	1
	2011	3	1	1	3	1	1	1	2	3	1
Activities for tackling learning difficulties of children	2009	NA	1	2	1	NA	NA	1	2	1	NA
	2010	2	2	2	1	NA	NA	1	2	1	1
	2011	2	1	2	2	1	1	1	2	1	1
Suggested Readings	2009	NA	1	1	1	NA	NA	1	1	1	NA
	2010	3	1	1	1	NA	NA	1	1	1	1
	2011	3	1	1	3	1	1	1	1	1	1
Follow up activities to reinforce learning	2009	NA	2	1	1	NA	NA	1	1	1	NA
	2010	3	1	1	1	NA	NA	1	2	2	1
	2011	3	1	2	1	2	1	2	2	2	1

Table 2.6
Expert's Rating of the Common Training Package Relating to Quality
Parameters for both Primary and Upper Primary School Teachers

Areas	Year	States						
		HR		JK		MH	MP	NL
		NHI	Educomp	JD	KD			
Agreement with objectives	2009	NA	NA	1	NA	2	2	3
	2010	NA	NA	1	1	2	2	NA
	2011	1	2	1	1	2	2	NA
No Caste and gender bias	2009	NA	NA	3	NA	3	3	3
	2010	NA	NA	3	3	3	3	NA
	2011	3	3	3	3	3	3	NA
Sequential Treatment	2009	NA	NA	2	NA	3	2	NA
	2010	NA	NA	2	2	2	3	NA
	2011	1	2	2	2	3	2	NA
Concept dealt was adequate	2009	NA	NA	1	NA	3	2	3
	2010	NA	NA	2	2	3	2	NA
	2011	1	1	3	3	3	2	NA
Appropriate Illustrations	2009	NA	NA	1	NA	3	2	2
	2010	NA	NA	2	2	2	2	NA
	2011	1	1	2	2	3	2	NA
Simple and easy to understand language	2009	NA	NA	2	NA	3	3	3
	2010	NA	NA	3	3	3	3	NA
	2011	1	2	3	3	3	3	NA
Encourage activity based teaching	2009	NA	NA	2	NA	3	3	3
	2010	NA	NA	3	3	3	3	NA
	2011	1	1	3	3	3	2	NA
Arouse and sustain interests of trainees	2009	NA	NA	2	NA	2	2	3
	2010	NA	NA	3	3	2	2	NA
	2011	1	1	3	3	3	2	NA
Appropriate transactional methodology	2009	NA	NA	2	NA	2	1	3
	2010	NA	NA	2	2	2	1	NA
	2011	1	1	2	2	2	1	NA
Sectional review in modules	2009	NA	NA	1	NA	1	1	1
	2010	NA	NA	1	1	1	2	NA
	2011	1	1	1	1	2	2	NA
Review exercises at the end	2009	NA	NA	NA	NA	1	1	1
	2010	NA	NA	NA	NA	1		NA
	2011	1	1	NA	NA	1	1	NA
Activities for tackling learning difficulties of children	2009	NA	NA	1	NA	1	1	1
	2010	NA	NA	1	1	1	1	NA
	2011	1	1	1	1	1	1	NA
Suggested readings	2009	NA	NA	1	NA	1	1	1
	2010	NA	NA	1	1	1	1	NA
	2011	1	1	1	1	1	1	NA
Follow up activities to reinforce learning	2009	NA	NA	1	NA	1	1	2
	2010	NA	NA	1	1	1	1	NA
	2011	1	1	1	1	1	1	NA

Activity based learning: Progressive improvement over the three years was evident in the experts' ratings in training packages for primary school teachers except in the states of Meghalaya and Odisha where improvement with regard to this parameter is warranted. In West Bengal there was scope of improvement. The upper primary school teachers' training package of Meghalaya and Odisha got the lowest rating while Bihar indicated scope for improvement. In the common training packages for both levels of teachers, Haryana training packages of both private agencies were rated the lowest due to questionable content validity. Nagaland package was not rated for this parameter while Madhya Pradesh package had scope for improvement.

Arouse and sustain interest of the teachers: In this regard, the training packages meant for the training of primary school teachers showed almost no improvement over the three-year period in the states except in Andhra Pradesh. Meghalaya, Odisha and West Bengal packages were rated the lowest while in other states there was scope for improvement. The rating was better in respect of the packages for upper primary teachers in the states of Rajasthan, Tamil Nadu and Uttar Pradesh where subject specific project based training packages showed better presentation and ensured interest through thinking and reasoning for application to school teaching context. The common packages for Haryana developed by the two private agencies were rated low and there was scope for improvement in the states of Maharashtra and Madhya Pradesh also.

Appropriateness of the suggested transaction methodology: Meghalaya and Odisha training packages were not rated on this parameter. Other states showed improvement over the years covered in the study. The training packages from the states of Gujarat, Rajasthan, Tamil Nadu and

Uttar Pradesh had scope for improvement. The training packages for the upper primary school teachers showed decline over the three-year period in all states except the states of Chhattisgarh and Odisha. Lot of improvement is called for at this stage in respect of this parameter.

Sectional reviews in modules: The situation in all states except Andhra Pradesh was found to be quite low. There was little or no provision for sectional reviews. For structuring cognitive learning this component is vital and needs to be employed in the training packages. This is required for self reading, consolidation of learning and using feedback in adjusting learning process in the session.

Review exercises at the end: The expert ratings seemed to indicate sporadic scatter without consistency either over the years or across the states.

Provision for tackling of learning difficulties of children: The training packages of almost all states were rated quite low on this vital parameter. The learning difficulties of children with special needs and other children with low educability received the mandate for inclusive education in the RTE-2009. This component needs to be addressed with a sense of urgency in the forthcoming INSET.

Suggested readings: For diversifying learning opportunity and mode of learning this component is considered very significant. ICT also plays a significant role in learning, especially self learning through search and research. The absence of this component in the training packages was at the cost of quality of training transaction.

Follow up activities to reinforce learning: The training packages were found to be low on this parameter too. The forthcoming INSET training packages need to be strengthened in this respect.

The analysis of the training packages reveals wide variation across the sampled states. The

variation is natural since training needs vary. The worrying factor is that these are not based on systematic training needs assessment. The trend of top down decision about the content of training is questionable. It makes the supply aspect of the training dominant at the cost of demand aspect ignoring real needs of teachers. Yadav (2006) indicates the direction along which self learning material for teacher educators needs to be developed and used.

The NCF-2005 is not reflected in the training packages of the sampled states. It should have been the main supply side content in the training packages during the last three years. As a result teachers remain at sea to transact the changed curriculum in schools. The INSET after the next few years will have to respond to the challenge of this major reform. A mix of both the supply side needs emerging from NCF and needs expressed by the teachers will have to be met by the INSET.

3

Training Package in States : An Assessment

Synthesis of the analytic view was profiled in the preceding chapter. The analytic view was based on the desk analysis reports prepared by the expert group in each of the 15 sampled states. This chapter provides state profiles for the benefit of the INSET designers and researchers addressing issues relating to this area so vital for the quality of elementary education addressing RTE and SSA needs.

ANDHRA PRADESH

The training programmes organized from 2008-09 to 2010-11 under Sarva Shiksha Abhiyan (SSA), known as Rajiv Vidya Mission (RVM) had different thrusts. The training programmes organized for primary teachers during 2008-09 and 2009-10 were titled as Comprehensive Language Improvement Programme (CLIP) and in 2010-11 as Learning Enhancement Programme (LEP). The training programmes for upper primary teachers were titled as Comprehensive Learning Acceleration Programme for Sustainability (CLAPS) and as Learning Improvement Programme (LIP) in 2010-11.

The LEP at primary stage covers all the subjects based on constructivist pedagogy, whereas LIP at upper primary stage is focused on subject-wise training separately for SUCCESS schools and general schools.

The development of training materials began during 2008-09 and continued up to 2010-11. For primary teachers 4 modules were developed and used in training programmes organized during 2008-09, while 10 modules during 2009-10 and 19 modules during 2010-11. For upper primary teachers 6 modules were developed and used in training programmes held during 2008-09, and 6 modules during 2009-10. In the year 2010-11, training modules were developed separately for SUCCESS schools and general schools. Six such modules were used for SUCCESS schools and 6 modules for general schools. Besides these modules, *Snehbala* (SLIM cards) for Telugu, Mathematics and Environmental Studies and materials for Multi-lingual Education (only for Tribal districts) were also developed.

Content Areas of the Training Package

The content areas of the training comprise general themes like child-centred approaches, content enrichment and pedagogical practices and innovative activities such as post box and wall magazine, along with innovative approaches in assessment. The training material is prepared by SRG based on the need assessment done by UNICEF and ITDA. The changes that occurred in the training package for primary school teachers during the last three years are summarized in Table 3.1.

Table 3.1
Training Packages for Primary School Teachers Used during 2008-09, 2009-10 and 2010-11

<i>Areas</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Changes</i>
Title of the Training Package	Comprehensive Language Improvement Programme (CLIP)	Comprehensive Learning Acceleration Programme for Sustainability (CLAPS)	Learning Enhancement Programme (LEP)	The focus of the training changed from Language acquisition to learning improvement
Objectives	• Attainment of mastery over language skills like reading, writing and numerical skills of mathematics for Classes I to V. • Promoting the learning competences in Language and Mathematics.	• To acquaint teachers with ongoing activities initiated by SSA like constructivist approach, Evaluation Process, School Performance Process and other innovative activities such as Post Box, Wall Magazine etc., • To empower the teachers on classroom process and Evaluation. • To impart necessary skills to the teacher in creating child friendly environment in Classes I and II. • To promote the ability in using school readiness activities.	• To create interest among pupils on learning of language, Telugu and English • To enable pupils to think logically and to reflect. • To enable the children to learn four skills of Mathematics. • Children should engage in learning science as a composite discipline. • Social Science content needs to focus on conceptual understanding rather than living up facts to be memorized.	Objectives are changed from the attainment of mastery over the language skills to creating interest in learning by using constructivist approach in the learning of various subjects at primary level. The focus on pedagogical and knowledge content of different subjects received attention.
Subject covered	• Language Skills- Reading, Speaking, Listening and Writing • Numerical skills	• Child-centred approaches • Content enrichment and pedagogical practices • Innovative activities such as post box, wall magazine • Innovative approaches in assessment	• Telugu, English, Mathematics, EVS, (Training packages used during 2008-09, 2009-10 and 2010-11)	The change of the focus from basic literacy and numeracy to subject specific innovative approaches for learning different subjects at the primary level. Focus on new approaches of assessment.
Modules in Training Package	• Comprehensive Language Improvement Programme (CLIP)- Reading	• Learning Enhancement Programme – Class I and II • Learning Enhancement Programme – Class III, IV and V	• General Issues with Special Reference to Multiple Classroom Teaching • Reading Readiness Activities • Numeracy Readiness Activities	Language learning approaches to learning enhancement approaches in all subjects including new assessment techniques as focused in NCF-2005. The subject

<i>Areas</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Changes</i>
	• Comprehensive Language Improvement Programme (CLIP) for Classes I and II • Comprehensive Language Improvement Programme (CLIP) for Classes III, IV and V • Read, Enjoy and Development	• 40 days Package for School Readiness Programme • Training Package on Reading Skills • LEP – Assessment Procedures • LEP – Assessment Procedures in English • LEP – Assessment Procedures in Telugu • LEP – Assessment Procedures in Mathematics • LEP – Assessment Procedures in Environmental Studies • Multi-Lingual Education for Classes I and II (Tribal Districts only)	• Health and Physical Education and Right to Education-2009 • National Curriculum Framework-2005 • Snehabala Hand Book • New Assessment Procedures • Learning Enhancement Programme – Grading Procedures • Training on Teaching English by using Discourse Pedagogy • Assessment Procedures in Telugu • Assessment Procedures in Mathematics • Assessment Procedures in Environmental Studies • Assessment Procedures in English • Snehabala-Telugu Class-I • Snehabala-Mathematics Class-I • Snehabala-Telugu Class-II • Snehabala-Mathematics Class-II • Snehabala-Environmental Studies (SLIM Cards) • Multi-Lingual Education (Only Tribal Districts)	specific issues as well as important concerns like advocacy for RTE-2009. Activity based approach in action with real classroom activities and also specific linguistic issues for disadvantaged groups received attention.
Transaction methodologies	More stress on language learning	• More stress on learning material for gifted children • More stress is needed on use of diagnosis and remediation.	• 1. Face-to-face training • 2. Review meetings • 3. Teleconferencing	Face-to-face one time trainings without any follow-up to face-to-face programmes cum follow-up of the through monthly meetings and through onsite support.
Evaluation procedure given in the package	Content should be translated in to competencies for competency based assessment.	Evaluation procedures based on the examples of content specific and context specific are missing in the training package.	An evaluation procedure on multiple response items and consolidation of multiple responses which is focused in NCF-2005 is missing. The content specific and context specific example with assessment procedures is missing in the training package.	Competency based assessment to learning assessment with qualitative feedback.

Transactional Approaches Used

The modules are transacted on the transactional methodologies. There is provision for module reading session which is followed by participatory demonstration of activities. All the above listed modules are covered in 10 days based on the following distribution:

The below listed seven modules are to be covered in 10 days face-to-face training. There is no provision to provide reflection on each of the above modules. The allocated time is insufficient to cover the modules. The modules did not take into consideration the available time for transaction. The developed modules seem to be ambitious.

Table 3.2
Training Packages used and its duration for transaction (Primary Stage)

<i>Title of the Module</i>	<i>Transactional Approaches</i>	<i>Duration</i>	<i>Evaluation Procedures</i>
General Modules	Module Reading	1 day	Feedback formats which are used as pre and post tests
Snehabala Telugu; Maths; EVS, and Readiness	Demonstration of Model lesson Live and Video	4 days	
Multiple Class Teaching	Demonstration of Model lesson Live and Video	1 day	
Early Maths; Reading	Demonstration of Model lesson Live and Video	1 day	
English	Demonstration of Model lesson Live and Video	1 day	
Physical Education	Demonstration of different activities	1 day	
Evaluation	Discussion on new evaluation procedures	1 day	

Available Time

Table 3.2 provides information about the available time for different components of the training package in Andhra Pradesh.

Alignment with SSA Guidelines

Table 3.3 summarizes the alignment of the training package on the SSA Guidelines 2008 updated in 2011 on the parameters specified in the table itself.

Table 3.3
Reflection of SSA guidelines in Training Packages

<i>SSA Guidelines</i>	<i>Status of implementation in training packages</i>
Constructivist Approach	Partly covered in all the subjects at primary level including English teaching and in the activities to promote the reading ability at the primary level including school readiness program.
Reflective Teacher	Activities in the training package provide opportunity for reflection to the teacher. Apprehension of the experts is that constraint available time for transaction is likely to preclude to avail the opportunity.
Split-Up model	SSA guidelines not followed. The 10 days face to face block training is split into 8 to 10 days and 2 to 4 days.
Training duration of 10 days	Only 12-day face to face training at primary was provided in 2010-11.
Training in other areas such as art and heritage Crafts, Health and physical education, work education, peace education, environmental education, science and mathematics	All areas except Peace Education have been included.
Identification of training needs	No formal need assessment was undertaken developing the training package.
Contextually relevant training design	Activity based methodology with the help of illustrations based on local socio-cultural context indicates contextuality of the training package.
Suggested reading list and other educational audio-video programme for teachers	Not given

The content of the training package is in correspondence with objectives; the content is free from the caste and gender bias; the content of the package emphasizes values enshrined in the Constitution of India; the contents of the modules are according to the needs of the trainees; the contents are sequential and as per treatment of ideas; contents are dealt with the concepts adequately; contents are described with the help of appropriate illustrations; the description of the content is described in simple and easy to understand language; the training material facilitates activity based training, and the self learning activities used in the package are potential to arouse and sustain interest among the trainees.

The training package has suggested appropriate transaction methodology with scope for remedial activities for children with learning difficulties. The modules do not provide list of suggested readings and follow up activities.

The *Snehabala* SLIM Cards are interesting and thought-provoking that are bound to attract learners' interest.

Training Package for Upper Primary Level

The changes occurred in the training package for upper primary school teachers relating to the 3-year period covered in the study are summarized in Table 3.4.

Table 3.4
Changes in the Upper Primary Teacher Training Packages

<i>Area</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Changes</i>
Title of the Training Programme	Comprehensive Learning Acceleration Programme for Sustainability (CLAPS)	Learning Enhancement Programme (LEP)	The focus of the theme has changed from learning acceleration to learning enhancement.
Objectives	Competency based learning	Process based learning with examples	The objectives were changed from competency based learning to process based learning.
Subjects covered	Telugu, English, Mathematics and EVS	Telugu, English, Mathematics, Social Studies and New Assessment Procedures	The subject specific approaches for developing the abilities in the concerned subjects
Modules	• Learning Enhancement Programme-Classes I and II • Learning Enhancement Programme- Classes III, IV and V. • 40 days Package for School Readiness Programme • Training Package on Reading Skills • LEP – Assessment Procedures • LEP – Assessment Procedures in English • LEP – Assessment Procedures in Telugu • LEP – Assessment Procedures in Mathematics • LEP – Assessment	• General Issues with Special Reference to Multiple Classroom Teaching • Reading Readiness Activities • Numeracy Readiness Activities • Health and Physical Education and Right to Education-2009. • National Curriculum Framework-2005 • Snehabala Hand Book • New Assessment Procedures • Learning Enhancement Programme – Grading Procedures • Training on Teaching English by using Discourse	Focused on mathematical abilities, science process skills and other abilities required for subject of learning.

	Procedures in Environmental Studies • Multi-Lingual Education for Classes I and II (Tribal Districts only)	Pedagogy • Assessment Procedures in Telugu • Assessment Procedures in Mathematics • Assessment Procedures in Environmental Studies • Assessment Procedures in English • Snehabala-Telugu Class-I • Snehabala-Mathematics Class-I • <i>Snehabala</i> -Telugu Class-II. <i>Snehabala</i> -Mathematics Class-II • <i>Snehabala</i> -Environmental Studies (SLIM Cards) • Multi-Lingual Education (Only Tribal Districts)	
Transaction methodologies	Participatory and Interactive	Self learning and discussions based on illustrations	Participatory learning, group work and self learning
Time required / recommended for transaction	10 days	Spread over the entire academic year	6 days of face-to-face followed by 8 days of monthly meetings at CRCs spread over the entire year.
Evaluation procedure given in the package		Evaluation after transaction of each module is missing	Feedback form to get the feedback.

Available Time for the Training Package

Table 3.5 specifies the available time for transacting each module of the training package for upper primary school teachers.

BIHAR

Training Package for Primary Teachers

During the year 2008-09, a single module entitled *Bodhi vriksh* (Reading Improvement Programme

Table 3.5
Training Packages used and its duration for transaction

Title of the Module	Transaction Approaches	Duration	Evaluation Procedures
General Modules	Module Reading	1 day	Feedback for mats were used as pre
Physical Education	Demonstration of different activities	1 day	
Evaluation	Discussion on new evaluation procedures	1 day	
Subject specific module	Demonstration of Model lesson-Live & Video	3 days	

The modules listed in the above table require 6 days face-to-face training. The experts group felt that the available time was not sufficient to cover the package with teacher reflection and in interactive mode.

The alignment of the training package for upper primary school teachers to the SSA guidelines is similar to that of the primary school teachers.

was developed by the BEPC, and UNICEF Bihar for the training of the primary school teachers. The focus of the two-day training package was to train primary school teachers of the state to acquire reading skills. Under SSA special focus was laid on acquisition of reading skills under Learning Enhancement Programme (LEP). However it was not in accordance with the SSA guidelines for in-service teacher training.

In the year 2009-10, another training module entitled *Bodhi Sambad Part-I* was developed. It focused on Motivation Teaching Skills and content based on curriculum. During the year 2010-11 the same module has been used for the training of primary school teachers. The module covered such areas as how children learn, learning with understanding, focus on constructivism, discussion on school, class, textbook and curriculum assessment with respect to language, maths and EVS. Content relating to language, maths, EVS, project appreciating EVS, art education and classroom management was also included in this package. The training modules were in tune with NCF-2005. The modules provided some features of the NCF but did not elaborate constructivist and reflective teacher practices. The modules were low most of the quality parameters included in the study. The resource material developed by BEP in collaboration with UNICEF and SCERT, Bihar seemed useful.

Features of the Training Package *Bodhi Vriksh* (Reading Improvement Programme) 2008-09

The BEPC in collaboration with UNICEF developed in 2008-09 a two-day training module entitled *Bodhi Vriksh [Padhana hua Assan: Bachan Unnayan Karyakram]*. The four-page module aims at orienting teachers, particularly those teaching at early grades (I and II) on importance of reading and to develop an understanding among teachers that books other than textbooks play an important role in child's learning. The message to teachers was to provide maximum opportunities to children to read.

The package was to be transacted within two days. Session wise objectives and expected outcomes were spelt out in the module. The training module written in Hindi was to be spread over nine sessions, five on the first day and four on the

second day. The sessions themes were: objectives of the training, achievement level of children Classes I and II, time available for study in school, use of supplementary books, discussion on lesson plan for Class I, discussion on lesson plan for Class II, activities related to the reading skills for Classes III, IV, V, development of reading skills among Classes III, IV, V students and speaking skills enhancement. The experts considered it an ambitious one for the duration of two days. The transaction could be at the awareness level. Time is grossly inadequate for skill acquisition.

Features of the Training Package *(Bodhi Sambad-I)* for 2009-10 and 2010-11

The training package was comprehensive covering subjects like Language, Maths, EVS, along with Art Education. The package included content, process and assessment along with classroom management. There were references to training materials related to each session for self study. However the session plans were not integrated and focused. The sequence was missing and the approach had been piecemeal. The Transaction Methodologies like participatory approach, group activity, self study and related materials were discussed. Session wise suggested reading proposed. Suggested reading materials were worthwhile. The learning package was difficult to translate into classroom practice. More time should have been anticipated for development of activities by participants in the subject areas.

Compliance with the SSA Guidelines

Table 3.6 summarizes the situation regarding compliance of the training packages to the SSA Guidelines for INSET in the state.

It is evident from Table 3.6 that the training package of 2010-11 was partly in conformity with SSA guidelines.

Table 3.6

Compliance of SSA Guidelines in the Training Packages

<i>SSA Guidelines</i>	<i>Packages of 2010-11</i>
Constructivist Approach	Partially covered in the package in the form of proposed activities for training transaction.
Reflective teacher	The packages did not provide opportunity to reflect on teaching..
Split-up model	SSA guideline followed.
Training duration of 10 days	Provided
Training in other areas such as Art and Heritage Crafts, Health and physical education, work education, peace education, etc.	Not covered
Identification of training needs	No formal need assessment was undertaken
Contextually relevant training design	Contextually relevant activity based methodology was followed in the training package
Suggested reading list and other educational audio-video programme for teachers	Few suggested

Training Packages for Upper Primary Teachers

For the year 2008-09, a training package, named, *Utkarsh II* was developed by the BEPC, Bihar. The training package included one specific module – mathematics. The information provided by SPD office indicates that in 2008-09 a package entitled *Training on Science and Mathematics Kit* was developed for training of upper primary teachers of the state. During the session 2010-11, the package was designed for Science (5 days) and Mathematics (5 days). Upper primary teachers who did not have sufficient background of Science and Mathematics were trained on *Bodhi Bhaskar* module. The information provided by state SPD Office maintains that 10-day training in 2009-10, on module *Patanjali* for yoga training was developed for physical education teachers at upper primary level. However the training duration reflected in the same module clearly reveals that the training was of seven days duration.

Utkarsh-II: Package for Mathematics during 2008-09

A set of questions on upper primary school mathematics syllabus was prepared by experts, which was subsequently administered over the teachers teaching mathematics. Then the test results were analyzed and their difficulties encountered by the teachers were identified. These areas were considered as their hard spots based on which their training needs were formulated. Accordingly, this training package was developed through workshop mode involving experts from state DIETs, SCERTs, and Universities of Patna, Ranchi, Lucknow and some experienced primary school teachers under the initiative of Bihar Education Project Council (BEPC).

The training package contains the following modules:

Content based: Rational Numbers, Terminating and Non-terminating Decimals, Scientific Notation, Factors and Multiples, Algebraic Expression, Equation, Square and Square root, Cube and Cube root, Indices and related rules, Ratio and proportion, Percentage, Profit and loss,

Time and Work, Time and distance, Simple and compound interest, Share and dividend, Advantages of general banking, Area (Rectangle, Square and Triangle), Lines and Angles, Construction of Geometrical Figures, and Statistics.

Pedagogy based: Misconceptions in mathematics, Importance of mathematics in daily life, Interest towards teaching mathematics, Basic understanding of mathematics, Preparation of TLMs, Evaluation, Demonstration of TLMs, Planning and preparation of Lesson Plan, and Presentation of lesson. In addition to the above, some notes on Action Research in Mathematics, Project Work, Establishment of Mathematics Laboratory, its use and brief introduction of some famous mathematicians are given at the end of the package. This package was used in 2008-09 and 2009-10. Most of the modules specified objectives, transaction mode, teaching learning materials, activities and concluding session/lesson.

While evaluating other aspects of the package the following observations emerged:

- Training modules were developed as per the objectives
- The content of training package was free from prejudices on the basis of caste and gender, etc. to a great extent.
- Contents of the module were developed sequentially on different concepts with examples. However, the treatment of the concepts is not exhaustive/comprehensive to enhance content competency of teachers.
- Language of the module was simple and appropriate.
- It suggests transactional strategies using lecture, group discussion, demonstration-cum-discussion, activity based learning, storytelling and question answers, etc.
- There was no provision of enrichment and remedial materials/activities for gifted and weaker learners.
- There was little suggestion for follow up activities for reinforcement of learning.
- There were 30 modules and time was inadequate to handle so many modules in five days training programme.

Science and Mathematics Kit

Why do we read science and mathematics? How do we teach science and mathematics? The package provided procedure for use of maths and science kit.

Evaluation Procedure Given in the Package

Evaluation needs to be focused through reasoning and thought-provoking questions. The experts group found the module in line with the stated objectives of training with scope for promotion of activity-based learning and teaching. However, the module does not have any illustrations or suggestions for reference materials. There is no provision for remedial activities. The areas like force and pressure, light, geometry, sound, biology can be easily translated in to classroom practices whereas modules on chemistry, electricity are difficult to transact in average classroom condition. The content of the package, particularly on chemistry and electricity, needs to be elaborated. The follow up of the training is not mentioned.

Training Package in Mathematics and Science during 2010-11

The features of the package from subject specific point of view are analysed. The module covers two subjects – Science and Mathematics.

- **Title:** BODHI - BHASKAR
- **Target Group:** Teachers of Upper Primary Schools of Bihar
- **Subject Area Covered:** Science and Mathematics (Mathematics section covered in this report).

- **Number of Modules in the Package:** Total 38 modules out of which 19 are mathematics modules spread over 10 days.
- **Number of Sessions:** 19 Sessions (One session for each module).
- **Duration:** 1 hour 30 minutes for each session/module.
- **Language of the Training Package:** Hindi.
- **Contents/Topics covered:** Numbers, algebraic terms, number game, algebraic expressions, fraction, factors of algebraic expressions, square and square roots, linear equations with one variable, percentage, geometric shapes, ratio and proportion, construction and congruence of triangles, quadrilateral, perimeter and area, shapes of common objects, parallelogram and its area, circle: circumference and area, cube, cuboids, cone and cylinder, data collection and representation.

Mode of Training Transaction: Several methods of transaction of training (more than one in each session) like activity-based, work-based, discussion, question-answer, dialogue, lecturing, demonstration, and blackboard work have been mentioned in the modules. While all these methods can be used in the constructive approach to the training transactions, the nature of the modules in the package does not seem to have adopted the approach. Rather heavy reliance on the traditional transmission approach is evident in the modules.

Utility of the Package: The issue whether the inputs could be translated into classroom practices was examined in respect of each of the modules in the package. It was observed that the inputs of each module were mathematical concepts and were dealt mostly through traditional methods in which the teachers are quite familiar. Therefore, the teachers familiar with the traditional methods will find no difficulty in transacting the topics in the classrooms. But if

following constructivist and reflective approaches are to be used or the activity-based approaches are considered for implementation in schools, the transactions in the present module fall far short of the expectations.

The training package developed by SSA, Bihar has not observed the SSA guidelines in great measure. The package does not include most of the items mentioned above to train the teachers for quality improvement. Therefore, in future when the training package is prepared, much better planning is necessary and guidelines need to be followed.

The training package titled as *Patanjali* was meant for both primary and upper primary school teachers. Its assessment has already been discussed in the primary school teacher training package. Alignment of the training package to SSA guidelines is also very similar to that of the primary school teachers. Expert rating of the training package on the parameters for assessment has been provided in Table 2.4.

Assessment of modules used for teacher training in the state for last three years showed that training except on science and mathematics kits was not meant for all teachers. There was no mention of the objectives of the training package/programme except in *Patanjali* module. But specific objectives for each module/session were spelt out. The overall use of language was simple and direct, and was the main strength of the package.

CHHATTISGARH

The training was organized for different subjects. For the year 2008-09, a single module, named, *Prabah* was developed by the SCERT, Chhattisgarh for the training of primary school teachers. It included four subjects, namely, English, Hindi, Mathematics and EVS. In the year 2009-10 two modules were developed in English and Mathematics. For the year 2010-11, three

modules were developed, namely, English, Mathematics and General Issues.

The training modules were prepared by the SCERT, Raipur, every year, starting from 2007-08. Teachers training plan and module(s) writing start by January. Training of Resource Persons(RPs) is generally completed by March/April. Need assessment was carried out before designing in-service training for teachers by SCERT, Raipur with the help of Regional Institute of Education (RIE), Bhopal. Workshop for needs assessment of training has been organized but due to teachers' indifference, no new training needs emerged.

Training needs were identified informally. Based on this TNA, content areas for training of

teachers were selected by a group of experts. These expert groups for each content area developed the assigned training modules. Some of the modules were developed with the help of DEP-SSA, IGNOU. Some external agencies whose support was solicited for the training also developed some of the modules. In addition, the SCERT, Raipur also developed training modules for the headmasters.

The modules developed during the last three years study period from 2008-09 to 2010-11 subjected to desk analysis by a group of curriculum and teacher education experts to identify changes, the process and the nature of the training packages over time. Table 3.7 summarizes the outcome of this exercise.

Table 3.7
Features of Packages used for Teacher Training at Primary Level

Subject	2008-09	2009-10	2010-11	Change
	- One module <i>Pravah</i> contains subjects like English, Environment Science, Mathematics, and Hindi. - Language of the module – It was bi-lingual (Hindi, English). It was a good practice as it increased the chances to be followed by all the teachers.	- One separate module for English titled <i>Shikshak Prashikshan Sandarshika-Angrezi</i> - Language of the module– Only English and it seemed difficult to be followed by all the teachers One ice-breaking session in the beginning of the module was discussed.	- Separate module for English titled as English Training Module - Assessment of training needs was done through workshop - Language of the module– Only English and it seemed difficult to be followed by all the teachers - One ice-breaking session in the beginning of the module was discussed.	Expanded module for English was introduced in 2010-11. Informal TNA was replaced by workshop mode in 2010-11
	Principles and methods of English, Reader analysis-exercises are given to get teachers more acquainted with textbooks used for classes III, IV, V, Demonstration lessons are explained briefly and some simple activities are given in demonstration lessons, Teaching of vocabulary,	1. Reading – I and II 2. Read with rhythm 3. Conjunctions and Pronouns 4. Structure of English Language 5. For listening and talking games and activities such as role playing and mock interview were given.	There are 18 activities on preposition, speaking skills; writing skills, poetry recitation etc. are explained.	Content of the module was reduced. Module for the year 2010 has less content and it is more focused on speaking and writing skills in comparison to previous years' modules. Classroom focus and practice included in the packages

Subject	2008-09	2009-10	2010-11	Change
	Language exercises to develop speaking and listening skills, Writing composition, Teaching of Poetry, Two language games to arouse interest are discussed, Importance of English as second language and objectives of teaching of English explained. • Title of the Module: 'Pravah' • Transactional methodology : Not clear, 'how' part was missing and only suggestions were there. The module did not equip a teacher to translate suggestions given in the module in the actual classroom practice. • Evaluation Procedure: Evaluation was suggested at the end of the training programme. • Suggested readings/ reference have not been given.	Title of the Module <i>Shikshak prashikshan Sandarshika-Angreji</i> Transactional Methodology: Transactional methodologies were not spelt out clearly. But, in some places activity based training methodology was spelt out. • Evaluation Procedure: Evaluation was suggested at the end of the training programme. Readings/ reference not suggested	Title of the Module: 'English Training Module' • Transactional methodology: Activity based. Activities are explained clearly with examples. - Illustrations and figures are satisfactory - Language of the module is gender sensitive. • Evaluation exercises are given at the end of each unit. • Instructions on how to use the module is given and time duration for each activity is explained • Suggested readings/ reference have not been given.	in the recent two years. Transactional methodology became more explicit and activities and games are added.
Hindi	• One module 'Pravah' contains subjects like English, Environment Science, Mathematics, and Hindi. Areas Covered: <i>Sikshana aur Gyan - II</i> chapter of NCF-2005 on 'how children learn' has been quoted, Concept of Hindi teaching and uses of punctuation marks, Sex/ gender in Hindi, Matra, Prepositions, Basic skills of language – listening, speaking, reading, and writing • Title of the module: 'Pravah'	No training module was developed. • Training in the subject of EVS was not included.	No training module was developed. Training in the subject of EVS was not included.	Not applicable.

Subject	2008-09	2009-10	2010-11	Change
	• Suggested readings/ references have not been given			
Mathematics	• One module '<i>Pravah</i>' contains subjects like English, Environment Science, Mathematics, and Hindi. • Areas covered – Numbers, addition and subtraction, Currency, Length, weight and capacity, Geometrical shapes, Proper and improper fractions, Percentage and conversion in to fraction. • Title of Module – '<i>Pravah</i>' • Transaction methodologies – Activities have been suggested particularly for addition and subtraction, currency, and fractions to involve students. • Time required for transaction was not mentioned, in the module. Estimated time 2½ days. • Evaluation procedure is not mentioned, some reinforcement exercises have been given. Some questions to evaluate Teachers' learning needed to be included • Suggested readings/ references have not been given	• Areas Covered: Tens, Place value, Addition, S u b t r a c t i o n , Multiplication and their relationships, Tables, Multiplication and its algorithm, Division and its algorithm • Title of Module: '<i>Aao Ganit Shikhen</i>' • Transaction methodologies: Some activities have been suggested. There are some typographical mistakes. Time required for the transaction of the module is not mentioned • Evaluation procedure has not been mentioned. Some exercises could have been given for the evaluation. • Time required for transaction was not mentioned. • Evaluation Procedure was not mentioned • Suggested readings/ references have not been given.	• Instructions regarding how to use the module and time division for a session are explained in 'About the module'. • Areas Covered : Pre-number concepts, Symbols of numbers, Addition, subtraction, multiplication, Division, and fraction, Decimal, percentage and area • Title of the module– '<i>Prashikshan Sandarshika-Ganit</i>'. • Transaction methodologies have been specified in each part of the module, these are explained well and are activity based that may enhance concept development. • Time required for transaction was not mentioned. • Evaluation Procedure: Questions for evaluation of progress at the end of each unit have been given. • Suggested readings/ references have not been given.	Emphasis on Pedagogy in module of 2010. Use of interesting, implementable, and contextually relevant activities is more in 2010 module in comparison to 2008-09 module.
Environmental Science	• One module '<i>Pravah</i>' contains subjects like English, Environment Science, Mathematics, and Hindi. • Objectives of the training: not stated	No training module was developed. Training in the subject of Hindi was not provided.	No training module was developed. Training in the subject of Hindi was not provided.	

<i>Subject</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Change</i>
	• Areas covered: 1. Earth, its shape 2. Circular and rotational motion 3. Accidents and disability • Title of the module: 'Pravali' • Transactional methodology: not given. Only description of some activities given in brief. For the implementation of these activities in classroom more detailed descriptions or explanation are needed. • Time required : Not specified in the module. • Evaluation Procedure: Evaluation was done at the end of the training • No list of suggested readings has been provided in the module			
General Issues	No training was conducted.	No training on general issues was provided.	Objectives of training : Objectives are not spelled out clearly. Areas Covered: There are 21 issues comprising the following: Life skills, adolescence and auto biographies of great persons, and self study habits etc., Educational issues such as curriculum and syllabus, enrolment and retention, CCE, school management, work performance appraisal, TLM and its use, special children, RTE 2009, and Communication skills, Issues related to educational measurement such as diagnostic test, test construction, blue print, etc. Title of the module : 'Shikshak Prashikshan Sandarshika-Samanya Muddey' • All the above issues are discussed in a theoretical manner. It seems difficult	

Subject	2008-09	2009-10	2010-11	Change
			to understand how these issues will be addressed and translated in the classroom, eg. concept of CCE is given but how a teacher will use this in her actual classroom teaching practice is missing. In the name of CCE scheme, more than one examination is given which is not enough and appropriate. • Transactional methodologies : Not given. • Time required - Not specified in the module. • Evaluation Procedure: Evaluation was done at the end of the training • No list of suggested readings has been provided in the module.	

Table 3.8 summarizes alignment of the training packages to the SSA guidelines based on NCF-2005.

Table 3.8

The Extent of the following of SSA Guidelines in the In-service Training Package(s) of Primary Teachers

Guide Lines	Assessment
Use of Constructivist Approach	English: To some extent the module has adopted the constructivist approach using induction approach to learning. Mathematics: Emphasis on experiential activities leading to the discovery of Mathematics characteristics points to the use of constructivist approach. <i>Samanya Muddey</i> (General Issues): To some extent.
Reflective Teacher	The provision is not explicit in English. Opportunity for reflection on material for Mathematics provided a little space for reflection by the teachers. In <i>Samanya Muddey</i> (General Issues) opportunity for the teacher reflections is not perceptible.
Split-up Model	The package does not reflect any guidelines for advocating a split-up model of in-service training. The objective of the module, as mentioned in the preface, is to develop the competency in the subject.
Training Format	The modules do indicate formal design for the training. However, the cover page (inside), six-days (Math), five days (General Issues) and five days (English) training schedule was given for the District Resource Group (DRG).
Areas Covered in the Training	The package includes modules related to Hindi, English, EVS, Mathematics and General Issues covering different topics related to the subject areas.
Training Need Assessment Suggested Reading/List of Audio and Video Programmes	Preface of the modules states that the training needs were identified by organizing a workshop. None of the packages contain suggested readings or list of audio video programmes.

It can be observed the above table that the training package reflects peripheral use of the SSA guidelines.

Overall, the training packages of 2010-11 are different. There is a change in the use of languages, inclusion of contents, citing examples and the methodologies to deal with those contents.

The training packages for upper primary school teachers reflect the similar concerns to those for the primary school teachers discussed above.

GUJARAT

The training packages of the SSA programme in the Gujarat State were prepared by SPD Office and GCERT with the collaboration of DIET and senior primary teachers of different districts. In the year 2009-10 and 2010-11, the training packages were prepared centrally and these were used in all the districts. But in the year 2011-12 the TNA survey was conducted by the state government during *Gunotsav* programme and the training packages were prepared district wise according to district specific needs of the teachers. All the districts have developed modules with the help of DIET, SRG and DRG members and senior primary school teachers.

Training packages of last three years 2009-10, 2010-11 and 2011-12 were assessed in respect of their objectives of training, content coverage, transactional methodology used, usability, and change over time and consistency with NCF-2005 guidelines. A committee of experts assessed the packages during the workshop held from 24 April, 2011 to 27 April, 2011 as per guidelines given in the tool ISTT-1.

The split-up model of in-service training of teachers has emerged from the SSA guidelines 2008. It envisages 10 days of block training complemented by 10 one-day training programme at the CRC level. In 2009-10, this model was

followed with the only exception of 10 days BRC level training and 10 days CRC level training. In 2010-11, it changed further. The training packages were developed accordingly. The block training was of 10 days but the cluster level training was reduced to 7 days at the CRC level. This reduction was due to the some census work and the election duty allotted to the teachers during this year. During 2011-12, 10 days training was followed in summer vacation from 18 April to 29 April 2011. Actually plan for this year was 14 days training with 10 days BRC level and 4 days CRC level, but due to other works allotted to the teachers the training span was reduced to 10 days instead of 14 days, but they prepared the plan for CRC level training every month and completed the 10 days CRC level training.

In the year 2011-12 the districts have planned the training according to the needs of the primary teachers. The state government organized a state wide yearly campaign called *Gunotsav* since year 2010-11. All the teachers were asked to provide their training needs. The data provided by the teachers were collected and analyzed at state level and block wise training needs were classified. The training packages were prepared in the district under the guidance of DIET, SRC and DRG members. The block wise training need of the lower primary teachers was provided to all the districts and the programme packages were prepared according to the need of primary teachers district wise.

From 2008-09 to 2010-11, GCERT and SSA office prepared the training package. For 2011-12, DIET and DPC in the districts of Amreli, Jamnagar, Mehsana, and Surat prepared the training packages since the work has been decentralized to the districts.

Table 3.9 points out specific changes/variations in the package(s) used in 2010-11 in comparison with those used in 2008-09, 2009-10.

Table 3.9
Change Indicators in Modules at Primary Stage (2009-10, 2010-11 and 2011-12)

<i>Particulars</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>Observation</i>
Title of the Training Programme	In-service Teacher Training Programme	In-service Teacher Training Programme	In-service Teacher Training Programme	No Change
Objectives of the training	• To help the teachers to enhance their capability in terms of content and process of learning • To improve the quality of classroom transaction to enable them to transact the curriculum in simple way. • To develop the language competency (Reading and writing skills) in Gujarati	Added the objectives relating to ADEPT	District wise need based objective formulated	Decentralised planning and District wise and need based modules and material prepared.
Areas Covered	• Reading/writing skills in Gujarati • Effective classroom interaction and positive attitude, • Enjoyable Education • Use of teaching Aids and ICT • Role and Responsibility of Teacher	• Reading writing skills in Gujarati • Joyful learning teaching methods • Right to Education and Removal of Child punishment . • Society buildup • Effective Classroom interaction, • Use of teaching Aids and ICT • Positive Attitude • ADEPTS, Cognitive, Social, Physical, Institutional, Dimension	• Reading/writing skills in Gujarati • School Administration, Planning and Organization • Continuous and Comprehensive Evaluation. • ADEPTS, Cognitive, Social, Physical, Institutional, Dimension. • Use of teaching aids and puppet • Language proficiency and team building • Classes I to IV (Gujarati, Environment, Maths and Hindi) • Teacher Training on Tribal Education	Earlier modules used during 2009-10 and 2010-11 focused only on language skills in Gujarati whereas in 2011-12 Gujarati, Maths and Environment are focused. Topics related to CCE, TLM, Puppets and elaboration of RTE, school administration, Gender, IED, STP, Team building and role of CRC, BRC ADEPTS, Workload and Stress are included. Documentation, Guidance and Counselling and Tribal Education are also included.
Number of the modules	Total number of module 04	Total number of modules 05	Total number of modules, Amreli-10 Jamnagar - 03 Mehsana-02 Surat-03	As evident, the number of modules increases as per the needs of teachers in respective district in 2011-12

Particulars	2009-10	2010-11	2011-12	Observation
Transaction methodology	- Activity based and skill based transaction - Use of ICT	- Activity based and skill based transaction. - Use of ICT	- Activity based and skill based transaction. - Puppet show - Use of TLM	Besides activity based learning puppet show and TLM have been mentioned in the modules.
Time required/ recommended for transaction, if any	Not mentioned in modules			
Evaluation procedure given in the package, including suggestions, if any	Activity based guidelines for evaluation of Gujarati language and other topics	Activity based guidelines for evaluation of Gujarati language and other topics covered in modules are included	Activity based guidelines for evaluation of Gujarati language and other topics covered in modules are included	Guidelines for evaluation are mentioned at the end of module and in some cases at the end of booklet.
Other				More illustrative using cartoons and puppets show, attractive cover page with better quality paper. Better utilization of space by providing messages and special page for preparing notes.

Table 3.10
District wise Details and Compression of Modules in Different 3 Years at Primary stage

Particulars	2008-09	2009-10	2010-11	2011-12			
				Amreli	Jamnagar	Mehsana	Surat
Title of the Training Programme	In-Ser vice Teacher Training Programme						
Objectives of the training	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction to enable them. To transact the curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction to enable them to transact the curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction. To enable them to transact the curriculum in	To help the teachers to enhance their capability in terms of content and process of learning to improve the quality of classroom transaction To enable them to transact the curriculum in simple way	To help the teachers to enhance their capability in terms of content and process of learning to improve the quality of classroom transaction. To enable them to transact the curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning. To improve the quality of classroom transaction in simple way.	To help the teachers to enhance their capability in terms of content and process of learning. To improve the quality of classroom transaction to enable them to transact the curriculum in simple way.

Particulars	2008-09	2009-10	2010-11	2011-12			
				Amreli	Jamnagar	Mehsana	Surat
		To develop the language competency (Reading and Writing Skills) in Gujarati.	simple way. To develop the language competency. To measure and improve the performance standards of teachers.				
Areas Covered	- Gujarati - Environment - Science	- Reading and writing skills in Gujarati. - Joyful learning teaching methods. - Right to Education and removal of child punishment - Society buildup - Effective classroom interaction, interest and concentration. - Human relation - Use of Teaching aids - Role and Responsibility of teacher - Positive Attitude	- Reading and writing skills in Gujarati. - Joyful learning teaching methods. - Right to Education and removal of child punishment - Society buildup - Effective classroom interaction, interest and concentration. - Human relation - Use of teaching Aids and ICT - Role and responsibility of teacher - Positive attitude - ADEPTS, cognitive Social, Psychical, Institutional Dimension	- Gujarati: Content and Method - Lesson planning - Classification of competencies - Evaluation. - Environment: Content and Method - Some concept - Method and techniques - Teachers activity - Correlation with different subjects - Evaluation - Maths Number theory - Multiplication - Division - Activity Based Learning (Pragna) - Meaning - Child Psychology - Role of Teacher in Pragna	- Content: Environment and school readiness - Maths: Numbers, Addition Multiplication, and Division, Currency and volume - Content: Environment - Role of Teacher, Environment awareness, Different Methods of Environment teaching, Different projects, related to environment - Grade wise - School preparedness concept, purpose and different activities and TLM, Child Psychology, CCE, Educational Organization, Language	Content (1 to 4) - Gujarati - Environment - Maths - Hindi General Training Modules - ADEPTS - CCE - Teaching Learning Process - Classroom Interaction - Correlation in Education	Content (1 to 4) - Gujarati - Environment - Maths - General Training Modules - Time management - Team building - Team building - Attitude development - Inter personal relationship - Effective classroom interaction - ERAC (Experience Reflection Application and Consolidation) - Documentation - Gender Education - STP Training - IED - Tribal Training

Particulars	2008-09	2009-10	2010-11	2011-12			
				Amreli	Jamnagar	Mehsana	Surat
				• Role of Teachers BRC, CRC in Pragna • Role of Teacher - Teacher Learning Process • Component of Teaching • Motivation • Personality • Interest and Attitude • Adjustment - Counselling and Guidance • Classroom Interaction • Evaluation test - CCE Plan • Meaning • Component and Plan • Student Evaluation - TLM and Puppet • TLM • Puppet – Script writing • Preparation of puppet • Concept • Material for puppet • Puppet show - School Administration and Organization - Gender	- readiness and Team Building Management. • Meaning, Need - Identification of problem of the children. • Meaning and importance, forms of CCE - Component, process of evaluation. • Meaning of Educational Organization - Different Activities, Communication and Evaluation. • Language readiness skills. - Through illustration, Use of technology in Language readiness, different methods of language readiness. • Meaning objectives and characteristics of team-building,		

Particulars	2008-09	2009-10	2010-11	2011-12			
				Amreli	Jamnagar	Mehsana	Surat
				Education IED • Right to Education • Gender Education ADEPTS • Statements of ADEPTS	Role of Teacher and Principal for Team building Evaluation Test for Team building • ADEPTS, Stress and Workload • ADEPTS, IED and Evaluation, STP (ALS), • Workload		
Title of the modules	Content book (Classes I to IV): Environment, Gujarati	• Reading writing methods and techniques (Classes I to IV) • Activity and joyful learning. • Effective classroom interaction and positive attitude • One day Teacher Training Package	• Reading writing methods and techniques • Classes I to IV • Special Training programme: • Gujarati (Classes III to IV) • Effective classroom interaction and positive attitude (Classes I to VII) • Right to Education- Removal of Child punishment and Society buildup	Gujarati : Content and Method • (Classes I to IV) Environment: Content and Method • (Classes I to IV) Maths Content and Method (Classes I to IV) • Co curricular activity and <i>pragna parichay</i> Teacher training module Teaching learning process • (Classes I to VIII)	Content: • Environment, Maths and School Readiness • (Classes I to IV) - Child Psychology, CCE - Educational Organization, Language Proficiency and Team building Management • (Classes I to VIII) - ADEPTS, stress and Workload	Content: • Gujarati, Environment and Maths • (Classes I to IV) - ADEPTS CCE	• Gujarati, Environment, Maths • (Classes I to IV) • Professional competency module • Teacher training on tribal education training material

Particulars	2008-09	2009-10	2010-11	2011-12			
				Amreli	Jamnagar	Mehsana	Surat
			ADEPTS-activity module	CCE Plan (Classes I to VIII) TLM and Puppet School Administration and Organization Gender Education & IED ADEPTS			
Transaction Methodologies including suggestions, if any	- Activity based teaching learning - Use of TLM	- Activity based and skill based transaction. - Use of ICT	- Activity based and skill based transaction. - Use of ICT	- Activity based and skill based transaction. - Puppet show - Use of TLM	- Activity based and skill based transaction. - Puppet show - Use of TLM	- Activity based and skill based transaction. - Puppet show - Use of TLM	- Activity based and skill based transaction. - Puppet show - Use of TLM
Time required/ Recommended for transaction	• 10 days	• 10 days	• 10 days	• 10 days	• 10 days	• 10 days	• 10 days
Evaluation Procedure given in the package, including suggestions	Guidelines for evaluation for different subject areas included in the module– Maths, Gujarati, EVS has been included in the modules (Classes I to IV)	Activity based Guidelines for Evaluation of Gujarati Language and other topics covered in the modules are included	Activity based Guidelines for evaluation of Gujarati Language and other topics covered in the modules are included.	Activity based Guidelines for evaluation of Maths, Environment, Gujarati and other topics covered in the modules are included.	Activity based Guidelines for evaluation of Maths, Environment and other topics covered in the modules are included.	Activity based Guidelines for evaluation of Maths, Environment, Gujarati and Hindi and other topics covered in the modules are included.	Activity based Guidelines for evaluation of Maths, Environment, Gujarati and other topics covered in the modules are included.

Table 3.10 reveals the changes that occurred over 3 years in the training programme. The title of the training programme and the module of the titles are the same.

The objectives of the training during the 2009-10 and 2010-11 were nearly the same but only the objectives of the ADEPTS training were added. In the year 2011-12, district-wise TNA was carried out all over Gujarat. The objective and the training modules were tuned to the identified district specific needs. The modules were developed in decentralized mode during the year 2011-12. In the sample districts of Amreli, Jamnagar, Mehsana and Surat these packages were used.

The areas covered in different districts show that in the earlier modules used during 2009-10 and 2010-11 the focus was only on language skills in Gujarati whereas in 2011-12 Gujarati, Maths and Environment Science are focused. Topics related to CCE, TLM, Puppets and elaboration of RTE, school administration, Gender, IED, STP, team building and role of CRC, BRC ADEPTS, Workload and Stress, Documentation, Guidance and Counselling and Tribal Education are included.

As is evident, the number of modules increased as per the need of teachers particularly in the year 2011-12. In the year 2009-10 total number of modules was 4, in the year 2010-11 total numbers of modules was 5, in the year 2011-12 the number of modules in Amreli district was 10, Jamnagar-3, Mehsana-2 and Surat-3. Reading writing skills, effective classroom interaction, Right to Education were common in the years 2009-10 and 2010-11. In the year 2011-12 the Amreli district prepared 10 modules (Gujarati, Maths and Environment content, TLP, CCE, TLM, SAO, GE, IED, ADEPTS). In Jamnagar district 3 modules (Gujarati, Maths and Environment content, Child psychology, School readiness, SAO, Language readiness, CCE,

ADEPTS and Stress and workload) were added. In Mehsana district 2 modules (Gujarati, Environment, Maths and Hindi Content, ADEPTS, CCE). In Surat District 3 modules (Gujarati, Environment, Maths Content in one module. General Training Modules, Time management, Team building, Attitude development, Inter personal relationship, Effective classroom interaction, ERAC [Experience Reflection Application and Consolidation], Documentation, Gender Education, STP Training, IED, Tribal Training) were included.

In the modules, transaction methodology has been almost same during all the three years. Activity based and skill based transaction and use of ICT were mentioned in 2009-10 and 2010-11. In the year 2011-12, over and above activity based and skill based transaction, puppet show, use of TLM were also included in the modules.

In the year 2009-10, 2010-11 and 2011-12 no time schedule was recommended for the transaction of the modules. But in a separate letter it was communicated that all these modules were to be used in 10 + 10 days SSA training.

Evaluation Procedure Given in the Package

Activity based guidelines for the evaluation in Gujarati language and the other topics were covered in the modules. Guidelines for the evaluation are mentioned at the end of modules and in some cases at the end of the booklet.

In the years 2009-10, 2010-11 and 2011-12 the modules were more illustrative. District wise and need based modules and materials were prepared. The modules were more illustrative using cartoons and puppet show. Better utilization of space was planned by providing special messages and special notes of renowned educationists and leaders. The special pages for preparing the notes and some

important message or steps were given at the end of modules. Thus the quality of module is very satisfactory.

Table 3.11 summarizes the alignment of the training package to SSA guidelines.

Upper Primary School Teachers

At upper primary stage specific changes/variations in the package(s) used in 2010-11 in comparison with those used in 2008-09, 2009-10 in respect of each item given in table 3.12 are pointed out.

Table 3.11
Assessment of Training Package Based on SSA Guidelines at Primary Stage

<i>SSA guidelines</i>	<i>Assessment</i>
Constructivist approach	The training package reflects constructivist approach in a small measure.
Reflective Teacher	Reflective teacher practices are not explicitly stated. However probing has been mentioned which has implicit implication.
Split-up Model of SSA	The suggested split-up model is given under SSA guidelines for in-service teachers training programme under SSA is not followed.
Guidelines for 10 days	The Guideline for 14 day continuous in-service training is recommended. In all four districts 4 days training has been withdrawn due to Census. The 4 days has been shifted to 10 days cluster level monthly meetings.
Training Area	Training packages of all the 4 districts for the year 2011-12 do not cover subject specific content areas such as (i) Art and heritage craft (ii) Work education and Health and Physical Education (iii) Peace Education. However content related to peace has been reflected in some of the modules indirectly. EVS, mathematics Gujarati language for Classes I and IV are covered.
Identification of Training Needs	Block-wise and district-wise training needs were identified by conducting "GUNOTSAV" (Through online survey)
Location Content and Specificities of teaching learning modules	Need based district specific training packages based on contextually and specificities are prepared.
List of suggested reading Audio/Videos	A list of suggested reading audio / video programmes for the teachers is provided in the packages of Amreli, Jamnagar and Surat and not mentioned in the packages of Mehsana district

Table 3.12
Change Indicators in Modules at Upper Primary Stage (2009-10, 2010-11 and 2011-12)

<i>Particulars</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>Observation</i>
Title of the Training Programme	In-service Teacher Training Programme	In-service Teacher Training Programme	In-service Teacher Training Programme	No Change
Objectives of the training	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction to enable them to transact the curriculum in simple way. To develop the language competency (Reading and Writing skills) in Gujarati.	Added the objective of teaching ADEPT	District wise need based objective formulated	Decentralize planning and District wise and need based modules and material prepared.

Areas Covered	• Reading writing skills in Gujarati • Effective classroom interaction and positive attitude, • Enjoyable Education • Use of teaching Aids and ICT • Role and Responsibility of Teacher	• Reading / writing skills in Gujarati • Joyful learning teaching methods • Right to Education and Removal of Child punishment . • Society buildup • Effective Classroom interaction, • Use of teaching Aids and ICT • Positive Attitude • ADEPTS, Cognitive, Social, Physical, Institutional Dimension	• Reading / writing skills in Gujarati • School Administration, Planning and Organization • Continuous and comprehensive Evaluation. • ADEPTS, Cognitive, Social, Physical, Institutional Dimension. • Use of teaching Aids and puppet • Language proficiency and team building • Classes I to IV (Gujarati, Environment, Maths and Hindi) • Teacher Training on Tribal Education	In earlier modules used during 2009-10 and 2010-11 focused only on language skills in Gujarati whereas in 2011-12 Gujarati, Maths and Environment are focused. Topics related to CCE, TLM, Puppets and elaboration of RTE, school administration, Gender, IED, STP, Team building and role of CRC, BRC ADEPTS, Workload and Stress are included, Documentation, Guidance and Counselling and Tribal Education
Number of the modules	List of the Titles (see appendices-B) Total number of modules – 05	List of the Titles (see appendices-B) Total number of Modules – 03	List of the Title (see appendices-B) Total number of modules Amreli-11 Jamnagar-03 Mehsana-02 Surat-03	As evident, the number of modules increases as per the needs of teachers in respective district in 2011-12
Transaction methodologies including suggestions, if any	• Activity based and skill based Transaction • Use of ICT	• Activity based and skill based Transaction. • Use of ICT	• Activity based and skill based Transaction. • Puppet show • Use of TLM	• Besides activity based learning puppet show and TLM was mentioned in the Modules.
Times required/ recommended for transaction, if any	Not Mentioned in Modules			
Evaluation procedure given in the package, including suggestions, if any	Activity based guidelines for evaluation of Gujarati language and other topics	Activity based Guidelines for evaluation of Gujarati language and other topics covered in modules are included	Activity based Guidelines for evaluation of Gujarati language and other topics covered in modules are included	Guideline for Evaluation are mentioned at the end of module and in some cases at the end of booklet.
Other				More illustrative using cartoons and puppets show, attractive cover page with better quality paper. Better utilization of space by providing messages and special page for preparing notes.

Table 3.13
District wise Details and Compression of Modules in Different 3 Years at Upper Primary Stage

Particulars	2008-09	2009-10	2010-11	2010-12			
				Amreli District	Jammagar District	Mehsana District	Surat District
Title of the Training Programme		In-service Teacher Training Programme					
Objectives of the training	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction To enable them to transact the curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning. To improve the quality of classroom transaction To enable them to transact the curriculum in simple way. To develop the language competency (Reading and Writing Skills) in Gujarati	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction. To enable them to transact the curriculum in simple way. To develop the language competency (Reading and Writing skills) in Gujarati. To measure and improve the performance standards of teachers.	To help the teachers to enhance their capability in terms of content and process of learning to improve the quality of classroom transaction to enable them to transact the curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning to improve the quality of classroom transaction to enable them to transact the curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning To improve the quality of classroom transaction curriculum in simple way.	To help the teachers to enhance their capability in terms of content and process of learning to improve the quality of classroom transaction to enable them to transact the curriculum in simple way.
Areas Covered	Content (Classes V to VII) • Gujarati • Hindi • Mathematics • Science • English General Topics • Child Development • Classroom Interaction	Content (Classes V to VII) Science and Technology • Right to Education and removal of child punishment • Society buildup • Effective	Right to Education and removal of child punishment • Society buildup • Effective classroom interaction, interest and concentration.	Gujarati: Content and Method • Lesson planning • Classification of competencies • Evaluation. Environment: Content and Method • Some	Gujarati: Content and Method (Classes V to VIII) • Number theory, • Multiplication division • Currency and Volume Science and Technology :	Content (Content: Maths: Classes V to VIII) Gujarati: • Project work related to grammar, sentence formation, story writing English: • Prayer, Action	Content (V to VIII) Gujarati • Project work related to grammar, sentence formation, story writing English: • Prayer, Action

Particulars	2008-09	2009-10	2010-11	2010-12			
				Amreli District	Jamnagar District	Mehsana District	Surat District
	- School Monitoring - School Society - Correlation and Activity based Learning Resource Person Modules - Gujarati - Hindi - Mathematics - Science - English	classroom interaction, interest and concentration. - Gujarati Language Proficiency - English Teacher Training	Positive attitude - Use of teaching Aids and ICT - ADEPTS, cognitive Social, Psychical, Institutional Dimension	concepts - Method and techniques - Teachers activity - Correlation with different subject - Evaluation Maths - Number theory, - Multiplication division - Activity Based Learning (Pragna) - Meaning - Child Psychology - Role of Teacher in Pragna - Role of Teachers BRC, CRC in Pragna - Role of Teacher Teaching Learning Process - Component of Teaching - Motivation - Personality - Interest and Attitude - Adjustment Counselling and Guidance - Classroom Interaction - Evaluation test - CCE Plan	(classes-V to VIII) - Heat energy - Parts of Plants - Light and Image - Our Bxody - Measurement of Area - Universe - Some General Diseases - Carbon - Reflection of light - Electricity - Social Science (classes V to VIII) - Village History - Historical Stories - Cultural Heritage - Local Bodies of Institute - Our Courts - Assembly - Public Property - Geography : - Unit 14 to 20 (Class VII) - Unit 10 to 17 (Class VIII) - Role of Teacher, School preparedness - concept, purpose and different activities and TLM.	- Types of skills, use of can, simple past tense, active-passive voice, use of dictionary Sanskrit: - Importance of Sanskrit teaching, Sanskrit grammar, demo lesson (Class VI), TLM (Class.VI), Competency list. Hindi: - importance of skills, aim of poems (Class V) ability no. 4.5.1, 4.5.5, 4.5.6 Maths: - Classes V to VIII) - Number theory, HCM, parameter of rectangle square, poly Science and Technology: - Discussion sheet: magnate, sound, lights,	songs, rhymes, conversations, reading and writing, language games. Hindi: - Class V : Picture story 1-2, picture reading 1-2, unit-1 to 6, 14. - Class VI: Unit-1 to 10. - Class VII: Unit 1 to 10. - Class VIII: 1 to 8 (Lesson), 1 to 9 (Poem) Maths: - Classes V to VIII - Number theory, HCM, parameter of rectangle square, poly nominal, Profit loss Science and Technology: - Games of magnifying glass, living, non-living, dispersion energy,

Particulars	2008-09	2009-10	2010-11	2010-12			
				Amreli District	Jamnagar District	Mehsana District	Surat District
				• Meaning • Component and Plan • Student Language readiness Evaluation TLM and Puppet • TLM • Puppet - Script writing, • Preparation of puppet • Concept • Material for puppet • Puppet show - School Administration and Organization - Gender Education - IED • Right to Education • Gender Education - ADEPTS - Statements of ADEPTS	• Child Psychology, CCE, Educational Organization, and Team Building Management. • Meaning, Need, Identification of problem of the children. • Meaning and importance, forms of CCE - Component, process of evaluation. • Meaning of Educational Organization - Different Activity, Communication and Evaluation. • Language readiness - skills. - Through illustration, Use of technology in Language readiness, different methods of language readiness.	leaver, acid base, types of energy, light and image, plants organs. • Social Science: • History of district, statutory bodies, environment of Gujarat. - General Training Modules • Time management • Team building • Attitude development • Inter personal relationship • Effective classroom interaction • ERAC (Experience Reflection Application and Consolidation) • Documentation • Gender Education • STP Training • IED • Tribal Training	plants organ. Social Science: • History of village, history of district, statutory bodies, environment of Gujarat. - General Training Modules • Time management • Team building • Attitude development • Inter personal relationship • Effective classroom interaction • ERAC (Experience Reflection Application and Consolidation) • Documentation • Gender Education • STP Training • IED • Tribal Training

Particulars	2008-09	2009-10	2010-11	2010-12			
				Amreli District	Jamnagar District	Mehsana District	Surat District
					• Meaning objectives and characteristics of team building, Role of Teacher and Principal for Team building Evaluation Test for Team building. • ADEPTS, Stress & Workload • ADEPTS, IED and Evaluation, STP (ALS), • Workload		
Title of the modules	Content Based Book (Class.V to VII): • Mathematics • Science • English • Hindi • Gujarati - ADEPTS- activity module - Training Related guideline - Managerial Subject Module - Child Psychology	Content Based Book (Classes V to VII): • Science and Technology • Effective classroom interaction and positive attitude • Right to Education- Removal of Child punishment and Society buildup • Gujarati Language	• Effective classroom interaction and positive attitude (Classes I to VII) • Right to Education- Remove of Child punishment and Society buildup • ADEPTS- activity module	Content Based Book (Classes V to VIII) : • Maths • Social Science • Science & Technology (Classes I to VIII): - Gujarati • Teacher training module - Teaching learning process • CCE Plan	Content Based Book (Classes V to VIII) : • Maths • Social Science • Science and Technology • Child Psychology, • CCE • Organization • Educational Proficiency • and Team building (Classes 1 to 8)	Content Based Book (Classes V to VIII): • Gujarati • Sanskrit • Hindi • Maths • Science and Technology - Social Science • ADEPTS • CCE	Training Guide (Classes V to VIII) • Gujarati • English • Hindi • Science and Technology • Social Science • Maths • Professional competency module • Teacher training on tribal education training material

Particulars	2008-09	2009-10	2010-11	2010-12			
				Amreli District	Jamnagar District	Mehsana District	Surat District
	and Education	Proficiency • English Teacher Training Module		(Classes I to VIII) • School Administration Planning and Organization (Classes I to VIII) • Gender Education and IED (Classes I to VIII) • ADEPTS • TLM and Puppet • Co curricular activity and <i>pragna parichay</i>	• ADEPTS, Stress and Workload		
Transaction Methodologies including suggestions, If any	• Activity Based Teaching Learning • Use of TLM	• Activity based and skill based transaction. • Use of ICT	• Activity based and skill based transaction. • Use of ICT	• Activity based and skill based transaction. • Puppet show • Use of TLM	• Activity based and skill based transaction. • Puppet show • Use of TLM	• Activity based and skill based transaction. • Puppet show • Use of TLM	• Activity based and skill based transaction. • Puppet show • Use of TLM
Time required for transaction if any	• 10 days	• 10 days	• 10 days	• 10 days	• 10 days	• 10 days	• 10 days
Evaluation Procedure given in the package, including suggestions, if any	• Guidelines for evaluation for different subject areas included in the module-maths, Gujarati, EVS has been included in the modules (Classes I to IV)	• Activity based Guidelines for Evaluation of Gujarati Language and other topics covered in the modules are included	• Activity based Guidelines for evaluation of Gujarati Language and other topics covered in the modules are included.	• Activity based Guidelines for evaluation of Maths, Environment, Gujarati and other topics covered in the modules are included.	• Activity based Guidelines for evaluation of Maths, Environment and other topics covered in the modules are included.	• Activity based Guidelines for evaluation of Maths, Environment, Gujarati and Hindi and other topics covered in the modules are included.	• Activity based Guidelines for evaluation of Maths, Environment, Gujarati and other topics covered in the modules are included.

As is evident, the number of modules increased as per the need of teachers particularly in the year 2011-12. In the year 2009-10 total number of modules was 5, in the year 2010-11 total number of module was 3, in the year 2011-12 the number in Amreli district was 11, Jamnagar-3, Mehsana-2 and Surat-3. Reading writing skill, effective classroom interaction Right to Education was common in year 2009-10 and 2010-11. In the year 2011-12 the Amreli district prepared 11 modules (Gujarati, Maths, Science and Technology and Social Science Content in one module, TLP, CCE, TLM, SAO, GE, IED, ADEPTS). In Jamnagar district 3 modules (Maths, Science and Technology and Social Science Content in one module, Child psychology, School readiness, SAO, Language readiness, CCE, ADEPTS and Stress and workload) were added. In Mehsana district 2 modules (Gujarati, Sanskrit, Hindi, Maths, English, Science and Technology and Social Science Content in one module, ADEPTS, CCE). In Surat District 3 modules (Gujarati, English, Hindi, Science and Technology, Social Science and Content in one module. General Training Modules, Time management, Team building, Attitude development, Interpersonal relationship, Effective classroom interaction, ERAC (Experience Reflection Application and Consolidation), Documentation, Gender Education, STP Training, IED, Tribal Training) were included. The result regarding assessment of training package in the light of SSA guidelines were almost same on the basis of primary stage.

Haryana

Under SSA there is a provision for providing In-Service Training to all teachers for 20 days (10-days block training + 10 days each at cluster level) every year. However, in the State of Haryana, training did not take place during 2008-09 and 2009-10. Interaction with State

authorities and examination documents reveal that authorities were not satisfied with the kind of training organized under SSA prior to 2007-08. It is learnt that there was dissatisfaction with not only the content of training but also with the organizational modalities and the institutions involved in this task. In view of this, the education authorities felt that teachers had received enough content based training but teachers lacked motivation and commitment to teaching.

They needed training with focus on motivation and commitment to the profession. In addition, teachers also need training to understand children better and new methods and techniques of teaching and student evaluation including the use of ICT both for teaching and assessment. Based on the above thinking, the State Education Department decided to out-source training activities to non-government agencies. After due process the task of In-service Training under SSA was assigned to two agencies: New Horizon India Limited (NHIL) and Educomp. A Memorandum of Understanding was signed with both agencies. It was agreed that the State of Haryana will provide physical facilities and nominate teachers for training and monitoring of training. The contracted entities will develop training materials, arrange trained trainers, organize training programmes at the designated centres.

Educomp

The agency has not prepared comprehensive training packages. Objectives to be achieved through training and procedure for assessment of the training outcomes have not been explicitly stated. The write-ups do not specify transactional strategies. The package includes write-ups on the identified themes of training. The training duration was divided into two phases of 7 days each. The material for the first phase of training was made available to the team for appraisal. The

material included in the package is divided into six blocks:

1. Sensitization of Teachers
2. Child Psychology
3. Methods of Teaching
4. Assessment and Evaluation
5. Use of Technology in Education

Each block is divided into units. Comments on each Unit are given below:

Block I: Sensitization of Teachers

This block includes units on Qualities of an Effective Teacher; Gender Issues; Health, Cleanliness and Nutrition; and Corporal punishment. The unit includes objectives but treatment of content in the write-ups is conventional. It would have been better if interactive style of communication was followed. Inclusion of Right to Education Act does not fit into the context of the qualities of an effective teacher. Quality and information provided do not match.

The unit on Gender Issues is largely informative. However, gender issues have been raised very briefly without in-depth discussion of the issues and contradictions. However, various schemes for education and welfare of girls have been discussed at length. The contradiction between the girl achievers and foetus termination in Haryana has not been highlighted as an issue. The presentations of high achievers are given without context. Mention with photograph of a current politician should have been avoided.

The content in the Unit on Health, Cleanliness and Nutrition is available in elementary school books. The presentation could have been analytical and how change in habits is to be brought about. However, specific health schemes implemented in the State of Haryana have been mentioned. This information is useful for the teacher to guide students to avail themselves of it. However, efforts have been made to make the write-up readable by giving news stories in boxes and by suggesting a couple of activities.

The Unit on Corporal Punishment is informative on account of the news stories in the boxes concerning teachers of Haryana. After referring to its provision in the RTE Act 2009, there is a statement that in spite of this provision in the Act report of 2007 had highlighted its prevalence. The treatment of the content is bookish without discussing 'why' and 'how' of the issue.

Block 2: Child Psychology

This block includes four units entitled:

1. Understanding the child
2. Motor development
3. Cognitive development
4. Moral development

The unit on 'Understanding the child' largely includes such material as is found in the textbooks on Educational Psychology. However, examples and activities suggested are satisfactory. The unit on motor development includes photographs of sports persons of Haryana. Their presentation does not fit into the context of child motor development. The terms cognition and knowledge have been used interchangeably in the unit as 'Cognitive Development' which is incorrect. This may be due to faulty translation. The presentation is confined to the work of Piaget alone. Lot of water has flowed down the river bridge since then. There is no reference to multiple intelligences. However, activities suggested in the unit are appropriate. In the Unit on 'Moral Development' factors affecting moral development have been mentioned, but it has not been explained how these factors operate in the context of moral development. For instance, the effects of culture, media and circumstances have been given in only one sentence each. The role of education and teacher has not been dealt with clearly. Strategies for the development of values have not been mentioned at all.

Block 3: Teaching Methods

This block includes the following units:

1. Microteaching
2. Lesson Planning
3. Multigrade Teaching
4. Project Based Learning

The title of the block is misleading as all the four units are not about methods of teaching. There is hardly any justification for including the Unit on Lesson Planning, Multigrade teaching and Micro-teaching in the block on teaching methods. Micro-teaching, in fact, is a training technique and not a teaching method. The Unit on micro-teaching mostly deals with teaching skills to be practised for mastery. Methodology for practising individual skills and integrating them in real classroom teaching is not even mentioned. Lesson planning is more relevant for pre-service teacher training. In-service teachers need other inputs like writing diaries with focus on creative teaching activities. The unit 'multigrade teaching' simply introduces the teachers to its concept without any discussion on modalities and alternative management of learning of different levels (grades) of students. The unit on 'Project Based Learning' (PBL) includes a section on PBL, section on 21st century skills and problem solving method. These three sections have been discussed in isolated manner without establishing link with each other. The section on 21st century skills simply provides a list of life and livelihood skills without linking the same to either PBL or problem-solving method.

Block 4: Assessment and Evaluation

The write-up does not include assessment. Only evaluation is covered. The material is just like a presentation in B.Ed books. The unit on preparation of paper test is relevant to the in-service training. It rightly includes types of questions, blueprint, etc. The activity to prepare test paper is appropriately presented.

Block 5: Continuous and Comprehensive Evaluation

The content is, by and large, presented in textbook style. The scheme of CCE being implemented in the State of Haryana has been mentioned without much discussion. It would have been better if the guidelines of NCERT and CBSE were included.

Block 6: Use of Technology in Education

This block includes two units on the Role of Technology in Propagation and Expansion of Education and Productivity Programme. The title of the first unit is misleading and its content is confined to the basis of computer hardware and software. Radio and TV have also been mentioned. The record unit mentions the possible use of software for different purposes such as with word processing, use of spreadsheet, power point presentation, etc.

Transactional Methodology

The write-ups do not include any expert suggestions for the reference of master trainers to transact modules. However, in a few modules some activities have been suggested. These can be considered as implicit guidelines. No manual for master trainers' training or guidance was available. Materials required for training have not been included in the package.

New Horizons India Limited

In pursuance of the MOU with the Haryana Government, New Horizons India Limited has designed In-Service Training of 14 days' duration for Primary and Upper Primary teachers.

Objectives

The objectives of the training have not been stated explicitly. However, in the 'Foreword' of the training module, it is stated that the training is expected to lead to far reaching changes in the day-to-day functioning and working styles of schools. There is need for flexibility in the daily

time table as well as in the annual calendar of the school so as to ensure the availability of the prescribed number of days. The training shall also enable teachers to make the life of students in schools free from stress and boredom so as to make it interesting for them. In addition, the training also aims at making the teaching process useful and effective.

Content of Training

The content of training has been selected in the light of themes suggested in MOU but it doesn't strictly correspond with the objectives mentioned in the 'Foreword.' There is no unit to equip the teachers to bring flexibility in the daily time table or annual calendar. However, there is a unit on stress management which aims at equipping the teachers to make students' life stress free. There are many units which aim at equipping teachers to make teaching process interesting and meaningful. Though 'Constructivist approach' and 'Reflective teacher' are not included in the package, but the master trainers can make use of the material to equip the teachers to construct knowledge in relation to the themes of different modules and also equip them to reflect on the issues raised therein. In other words, conformity of the package with SSA training framework cannot be determined on the basis of the content of the package.

Modules in the Package

The training package includes 14 modules on different themes which has not been clubbed together as 'Blocks' or 'Cluster.' Each module is an independent and self-contained entity.

The module titled 'Sensitization of teachers' aims at sensitizing teachers towards five themes which are not linked to each other. The title of the module is not appropriate. The content is largely informative.

The second module is on motivation of teachers. It includes bookish material, which is presented in the style of an article. The definitions and the meanings of motivation, 'Student' and 'Teacher' have been derived artificially from the alphabets of these words. The language used is not easy to understand. The translation of the subject matter from English to Hindi is not appropriate. The module on 'Educational Technology' is not adequate as it includes discussion on only one instructional strategy, that is, teaching-learning in groups. The use of technology has been discussed in less than a page. Module 4 on Child Psychology is presented in the style of a textbook. Piaget's Theory of Cognitive Development has been discussed on the basis of 4 cases, which enables the reader to draw their own conclusions. Multiple Intelligences has been discussed in the context of learning styles. The module is the combination of some themes which are loosely linked to each other and are not in a logical sequence.

Module 5 is on the role of Parents and Community in Education. The content of this module is quite adequate but it is not presented in interactive style. It should be easy to elicit the subject matter of this unit from the participating teacher. Module 6 is on the Identification of Children with Special needs. The examples of 26 successful individuals having some disabilities can have a positive impact. The types of disabilities have been explained with the help of cases of students with disabilities. Learning disabilities have also been discussed in detail. The content of the module is adequate. Module 7 discusses use of ICT in education and evaluation. Besides basics of computers, the module discusses use of other technologies in education and evaluation. Module 8 discusses stress management techniques. The content is good but it appears like a chapter in a book. The scope for reflection has not been built into the style of presentation.

Module 9 on Classroom Skills and Processes includes discussion on teaching learning strategies, learning styles, classroom management, Do's and Don'ts for Teachers, School Records. Thus, too many concepts have been included in one module without linking them to one another. Module 10 is on Lesson Planning and Assessment. It is not understandable why lesson planning has been clubbed with Assessment. Lesson Planning is more relevant for Pre-Service teacher trainers. The section on Assessment discusses forms of assessment testing, portfolio assessment semester system, etc. Some assessment forms have also been given. The content of the module is good and adequate.

Module 11 on Methods of Teaching includes Microteaching, techniques (Lecture, discussion, etc.), Project Based Learning, Problem Solving Method, teaching styles, etc. Microteaching has been discussed as a teaching strategy, whereas it is a training strategy. The section on teaching styles includes an activity which may help the teachers to know their teaching style. It is not understandable why Interaction Analysis has been clubbed with Microteaching. Three examples of Microteaching lesson plans have also been given. In short, too many things have been put together in one unit without ensuring continuity between different units.

Module 12 is on evaluation and discusses CCE in detail. It includes 12 suggestions to make evaluation effective. Besides discussing the scope of CCE, it also discusses quantitative and qualitative method of evaluation. The content is presented in the style of an article in a journal. The subject matter is not adequate to equip the teachers to make use of CCE for student evaluation. It would have been better if some practical activities were included to provide hands on experience in the use of CCE.

Module 13 on Guidance and Counselling covers the difference between guidance and Counselling characteristics of Counselling,

Problems of Adolescents, Inferiority complex, Assessment of friendship, etc. The content is good and adequate but practical activities would have made the unit more useful and interesting. Module 14 on Personality Development is written in a textbook style. It discusses factors affecting personality development, importance of body language, methods of developing interpersonal skills. Developing positive attitudes, conflict resolution, effective communication have also been discussed. It also includes some important information about Health. Thus, too many things have been included in the unit. The content is good adequate but the language used is full of mistakes. There is hardly any continuity between different sections of the module.

The package comprises 14 modules on different themes. One full day divided into four sessions is devoted for the transactions of one module. The comprehensive coverage of any theme is not possible within the limited time available for training. This implies that only very critical aspects of the 'Theme' should be identified for discussion during face to face training. But the different sub-theme should be linked to each other and there should be continuity in the presentation. Unfortunately this is lacking in the package. Moreover the rationale for the selection of the different sub- themes should be explained in the beginning of the module, that is the reasons for the inclusion of the identified sub-themes and also reasons of non-inclusions of the remaining ones.

The content in most of the modules is presented in the style of a textbook. The presentation of the content is not in tune with the SSA framework of In-service training which emphasizes the need for the equipping the teachers for reflections and construction of their own knowledge. This implies that the realization of the objectives of SSA training framework has been left to the ingenuity and expertise of the Master Trainers. This further implies that the Master trainers for this programme must be very

seasoned, experienced and expert in their field of specialization. The content of the package indicates that master trainers possessing specialized knowledge areas like pedagogy, psychology, educational technology and ICT, evaluation, special education and school education shall be necessarily required to impart effective training.

The language used at some places is not easy to understand. It may be due to the translation of the material from English to Hindi.

JAMMU AND KASHMIR

In the State of Jammu and Kashmir two State Institutes of Education are functioning, one of

them located at Srinagar and the other in Jammu. Both prepare training material for their respective zones and also organise NSET separately. In 2008-09 training was organized on the basis of modules prepared by the State Institute of Education, Jammu during summer. These were approved by making some modifications and additions during 2009-10 and 2010-11.

The expert rating on training package of Jammu division is given in Table 3.14.

Jammu Division

Table 3.14 provides a comparative scenario of training packages during the three day period covered by the study.

Table 3.14
Changing Content of Inservice Teacher Training s2008–09 to 2010-11

Group	2008–2009	2009–2010	2010–2011	
			June 10	January 11
Issue	• Teacher Education • Vocational Education Training • Action Research • Health promotion in schools • Motivation • Value Education • CCE • Effective Communication skills • Child right • PRATHAM	• Vocational Education and Training (VET) • Inclusive Education • Stress Management • Gender Sensitization • Peace Education • Health promotion in schools • Health and Physical Education • Early Childhood Care and Education (ECCE) • NCF-2005 • Women empowerment	• Ways and means of inculcation of values at elementary level • Inclusive Education • Peace Education • Gender Sensitization • Disaster Management • School health and hygiene • ECCE • Community Mobilization • Stress Management • Values	• Teacher Motivation • Child Psychology
Pedagogy	• Audio Visual Aids	• Low cost teaching aids	• Concept of LEAP, LEAP Schools and Active Pedagogy • Low cost/No Cost Teaching Aids (Audio Visual Aids) • Innovation for effective learning • Setting up of learning corners	• LEAP Challenges and new perspective • Use of teaching aids in teaching learning process • Innovation for effective teaching

Group	2008–2009	2009–2010	2010–2011	
			June 10	January 11
Language teaching (Hindi)	Effective Hindi Learning	- Teaching of Hindi Language - Effective Hindi Learning	- HINDI - Activities related to Hindi Learning - How children Learn Hindi	- Manak Varan Mala - Manak Vartni - Teaching of poetry (Pehli Boond) - Concept of Hindi Teaching (Primary Level)
(English)		- Direct and Indirect Narration - Active and Passive voice	- ENGLISH - Teaching of English Phonetics - Teaching of English Grammar (Auxiliaries) - Importance of English in the present scenario. - Strategies for strengthening of English Language - How Children Learn English	- Pronouns - English poetry - Vocabulary
(Urdu)	Teaching of Urdu	Importance of Urdu Grammar and Methodology		- Teaching of Urdu Language Skills - Teaching of Poetry Introduction of Words (Two scripts?)
Science teaching	Sound	- Electric charges at rest - Cell- the building block of life - Acid, Bases and Salt	- Microbial world - Circulatory System - Learning of Science through activities (light) - Essence of Science	- Metal and their properties - Cell (Plant and Animal) - Separation of substances. - Sound - Changes around us - Force and pressure - Reproduction.
Maths teaching	- Teaching of geometry at elementary level - Geometrical shapes	- Algebraic expression - Teaching and learning of mathematic through activities	- Math phobia - Activities for primary mathematics	- Math phobia - Using decimals - Illustrations of formulas

Group	2008–2009	2009–2010	2010–2011	
			June 10	January 11
EVS (Social and Physical)	Locating places on the earth	- Global warming - Imperialism.	- Activities related to Environmental Science. - Locating places on earth.	- Fundamental Duties and Directive Principles. - Local Administrative Structure - Struggle for Swaraj - The Mauryan Empire - Formation of Days and Night - How seasons are formed - Studying Local Maps
School Management and Planning	Planning	Institutional Planning	- Role of schools in preserving our cultural heritage - Vision for effective learning - Planning and Management	School records and Academic calendar.
Educational Technology	- Computer Education - ROTS	- Computer Education/ EDUSAT - ROTS	Computer Aided Learning	Computer Aided Learning
Training Technology		ADEPTS	Microteaching (Training Method)	

Objectives have been specified and content covered is included in the training packages.. Activities based transactional methodology has been elaborated. However evaluation and follow up of the training programme are missing. The content density is also very high.

Comparative analysis of changing contents of the training packages for 2008-2009 to 2010-11 are:

- For two consecutive years Vocational Education and Training (VET) was included but in 2010-11 it was excluded.
- A unit about Action Research was included in the package for 2008-09 but in 2009-10 and 2010-11.
- Some emerging issues such as child rights and communication skills were discussed in 2008-2009 only, not in 2009-10 and 2010-11.

- However some new issues such as gender sensitization, peace education, disaster management, inclusive education, stress management and community mobilization have been taken up in the training packages of 2009-10 and 2010-11.
- In pedagogical area the units about teaching aids with specific emphasis on low cost teaching aids have been taken up in all the training packages for the three years, i.e. 2008-2009 to 2010-11.
- In 2010-11 one specific unit on setting up learning courses was found. In the same way the concepts of LEAP and LEAP schools were emphasized in 2010-11 but not in 2008-2009 and 2009-2010.
- In language teaching the emphasis on Hindi

learning gradually increased from 2008-2009 to 2010-2011 in terms of number of units and variety in contents.

- In 2008-2009 there was no unit on English learning; however, in 2010-2011 some specific units on phonetics, grammar and vocabulary were included.
- In teaching of Urdu, units about skills and grammar part were found in 2009-2010 and 2010-2011.
- In Science learning only one unit on sound was found in 2008-2009, whereas emphasis on science in terms of its specialization such as physics, chemistry and biology gradually increased in 2009-2010 and 2010-2011.
- In mathematics learning a unit on mathematics phobia was introduced in 2010-2011. However not much emphasis was laid on other specific content areas of mathematics in all the three years.
- For environment sciences (Social and Physics) some new issues such as Fundamental Duties and Directive Principles, struggle for Swaraj, formation of day and night and Mauryan empire have been taken up in 2010-2011 not in 2008-2009 and 2009-2010.
- Educational technology was found almost a neglected area as only 1-2 units on CAL and

EDUSAT were found in the package for three years.

- A unit on micro teaching was included in 2010-2011 which was not considered relevant in the context of training. However in 2009-2010 a unit on ADEPTS was added but not found a place in 2010-2011 training package.

Kashmir Division

In *Kashmir Division* training is provided by SIE Kashmir. Bringing out training package is one of the multifaceted activities of SIE Kashmir. The exercise is of vital importance in giving directions to the training at lower levels and while developing the package, all state holders are taken on board. The training was organised in winter vacations in Kashmir Division. The dates of monthly meetings are always fixed in the state.

Training packages for only two years, i.e. 2009-10 and 2010-11 were provided to the team for assessment. Team members studied the training packages, carefully analyzed them and assessed content coverage, presentation, illustrations and other components. Table 3.15 provides comparative scenario.

Training Package on General Issues

In 2009-2010 inclusive education, community mobilization, Disaster Management, ECCE,

Table 3.15
Changing Content of In-service Teacher Training 2009-10 and 2010-2011

Group	2009-10	2010-11
General Issues	• Inclusive education • Community mobilization/Participation • Disaster Management • Early Childhood Care and Education (ECCE) • Peer tutoring and co-operative learning	• Inclusion education • Community Mobilization • Disaster Management • Leadership • Learning Disabilities • Right to Education (RTE) • Right to Information Act • Health disorders among school children • Multigrade teaching • Heritage Education • Gender Education • Peace Education • Vocational Education

Training Technology	• What is ADEPTS?	---
Pedagogy	• Learning Enhancement through Active Pedagogy (CEAP J&K 2009-2010) • Critical thinking and problem solving in students • Aims of Teaching and Learning • Establishment of Learning Corners • Activities related to Primary Classes	• LEAP challenges and new perspectives • Learning corner • Child Profiling • Pupils Assessment
School Management and Planning	• School Grading • Role of libraries, Reading Corners and local sources in language learning • Institutional Planning	• Inclusive Classroom management • Organizing Early Childhood classrooms • Early Childhood Programme Planning • Mid-day meal scheme • Monitoring and supervision
Language teaching	• Activities related to English learning • How to use stories to learn English	• Curriculum in English (Teaching of English) • Pedagogy of teaching English
(Urdu)		• Pedagogy of teaching Urdu • Model lesson in Urdu
(Kashmiri)	• <i>Fan-i-Tadrees mein Mazmoon Nigari</i> • <i>Sheur Kathe Heychun Koushur</i>	• Pedagogy of teaching Kashmiri • Unit Planning in Kashmiri (Prose) • Unit Planning in Kashmiri (Poetry)
Maths Teaching	• Mathematics Teaching	• Pedagogy of teaching Mathematics • Unit Planning in Mathematics • Model Lessons in Mathematics

Peer Tutoring and other issues were taken up in the training.

In 2010-2011 inclusive education, Community mobilization, Disaster Management, leadership, Learning disabilities, RTE, Health Disorders among school children, Multigrade teaching, Heritage education, Gender Education, Peace Education, vocational education were taken up in the training. Some issues were the same and some were added in 2010-11. All the topics were

transacted through lecture method. Content is logically arranged with examples. Language of all topics is simple and easy to understand. But diagrams are not given in colour. Printer is very light. List of suggested readings is not given.

In both the modules objectives of training were not given clearly. Language of all modules is simple and easy to understand with stress on activity based teaching which has the potential to arouse and sustain interest of the teachers.

Table 3.16
Training Package on General Issues

Group	2009-10	2010-11
Science Teaching	• Essence of Science	• Unit Planning in Science • Model Lesson in Science
EVS (Social and Physical)	• Framework for social science learning • Different strategies to teach social science in elementary classes • Life in Vedic Age	• Pedagogy of social science teaching • Unit Planning in social science • Model lesson in Geography

Proper illustrations, examples and diagrams are given but the print is not clear and labeling is very small. In module 2009-2010 there is repetition of some pages of ADEPTS. In both module there is no proper assignment of page numbers to contents. No proper transactional methodology is given and there is need to add sectional review at the end of each module. No list of suggested readings is given or suggestions for follow up activities offered, though at the end of each module review exercises are given. Strong emphasis is given on use of technology while teaching and all languages/subjects have been given equal importance. Teachers are also trained for effective school management and planning. Many new areas have also been added like community involvement and issues of national and international interest. Areas like cultural

heritage, health and physical education, education for peace besides training in basic subjects like languages, EVS and Mathematics have been concerned. Arts and work education have been neglected. No information regarding training needs and development of appropriate training modules through BRG/DRG SRG is provided. In some packages review questions at the end are given but there is no specific plan for evaluation of the training. NCF-2005 recommendations have been kept in mind and an important shift is seen from general areas to subject content areas from 2008-09 to 2010-2011. Many new important areas have also been added.

MADHYA PRADESH

In the state of Madhya Pradesh in-service training has undergone a change during the last three years

Table 3.17
Ten Days In-service Training Pattern for Primary and Upper Primary Teachers
in Madhya Pradesh

Subject	2008-09		2009-2010		2010-11
	Primary	Upper Primary	Primary	Upper Primary	
General	-		-	½ day	Combined training package for primary and upper primary teachers. 8 days**
English	-	-	2 days	2 days	
Mathematics	-	-	2 days	2 days	
Hindi	-		2 days		
EVS Social	-	-	-	1 day	
EVS Science	-	-	-	1 day	
Health and Hygiene	-		-		
Activity based Module applied to curricular areas	-		4 days	½ day	
CWSN	-	-	-	½ day	
Science Lab	-	-	-	½ day	
Maths Lab	-	-	-	½ day	
Human Rights	-	-	-	½ day	
Competency based TLM in EVS/SS	-	-	-	½ day	
TLM in English	-	-	-	½ day	
Number of days	10 days*	10 days	10 days	10 days	

* Distribution of time according to instructions from Secretary, School Education dated 3.6.2009

** Distribution of time not available

The emerging pattern deviates a lot from the SSA guidelines. The block training has been reduced to 8 days during 2010-11 and 10 one-day training is conspicuous by its absence since CRC meetings are utilized predominantly for information flow from schools through District Project Office (DPO) to State Project Officer (SPO) and back. During 2008-09 and 2009-10 the packages were separate for primary and upper primary teachers. The 2010-11 training package is common for both primary and upper primary teachers. It is divided in to two parts, part one deals with general issues

and the second part provides application of activity based learning to different subject areas.

Pattern of In-service Training

Tables 3.17 summarise the structural pattern of in-service training of primary and upper primary teachers.

The Table 3.18 summarizes the changes that have taken place in the training packages for three years.

As revealed in the Table 3.18, there are changes under different heads. So far the title of the training programme is concerned there is no

Table 3.18
Specific of In-Service Training Packages for Primary and Upper Primary Teachers over the last three years (2008-09, 2009-10 and 2010-11)

<i>Topic</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Changes</i>
Title of the Training programme.	In-Service Teacher Training	In-Service Teacher Training	In-Service Teacher Training	No Change
Objectives of the training	Competence building of teachers for teaching of English and Maths	Teaching of different subjects with content and CCE	Teacher empowerment for improving the quality of education through CCE, Girls education, Inclusive education, development and use of TLM, Use of ICT etc.	During 2009-10 shift was to cover all the subjects. During 2010-11 shift to general training, i.e comprehensive pedagogic knowledge of teachers (Focus on NCF-2005)
Titles of the modules	<i>Primary Stage</i> - English - 8 Units (36 P) - Mathematics <i>Upper Primary Stage</i> - Mathematics - 6 Units (31 P) - Science - 8 Units (33 P) - Social Science - 5 Units (25 P) - English - 8 Units (37 P)	<i>Primary Stage</i> - Hindi - 12 Units (67 P) - English - 17 Units (94 P) - Mathematics - 6 Units (26 P) - EVS - 9 Units (78 P) <i>Upper Primary Stage</i> - Mathematics - 7 Units (62 P) - Science - 6 Units (30 P)	PART A - General - Mass Education Act and Community Participation in School - Departmental Structure - Education Code - School Ethics - Moral Education - Yoga Education - Educational Psychology - Multigrade Teaching	

<i>Topic</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Changes</i>
		- Social Science - 7 Units (51 P) - English - 8 Units (43 P)	- T.L.M - What, why and How? - Classroom Transaction - Educational Index: Enrolment and Retention - School Management - Financial Management - Evaluation and Examination - School Library - Co-curricular Activities - BALA (Building As Learning Aid) - Infrastructural Development: An Important Component of Education - IRI (Interactive Radio Instruction) - ICT in Education - Health and Hygiene - Sarva Shiksha Abhiyan (SSA) - Continuous Education - Girls Education - Inclusive Education - Competency Enhancement Programme - Case Study and Action Research in School Education - Educational Plans of the Government - Partnership - Right to Free and Compulsory Education of Children - 2009 - Human Rights - Active Learning Methodology (ALM) - Different Grants Available under SSA and its use - Guidelines for Utilization of Teacher's Grant	

<i>Topic</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>Changes</i>
			- Activity Based Learning (ABL) - Role of Teachers in National Curriculum PART-B - Activity - What, Why and How? - Meaning of Teaching Aid - Early Literacy and Mathematics - Inclusive Education - Health and Hygiene - Better Planning means Success of the Task - Classroom Management - What is Evaluation? - Indicators of School Support - Examples of Activities (Class and Subject-wise)	
Transaction Methodologies including suggestion, if any	Group Work	There is no reference to transaction methodology.	There is no reference to transaction methodology. In 2010-11 also they have followed the group work strategy. In some of the modules self evaluation questions have been provided.	Emphasis on self evaluation
Time required/ Recommended	10 days of time allocated appears to be sufficient with limited area coverage	10 days training is divided area-wise. It appears to be appropriate.	8 days of time is insufficient taking into consideration the coverage of all the aspects of NCF-2005 including CCE, ABL, ALM, Inclusive education and RTE.	Time provided was insufficient. During 2009-10, detailed break-up of the training schedule given was appropriate.
Evaluation Procedure	Not given in the package	Not given in the package	Not given in the package	No change

change at all. None of the training package specifically mentioned the objectives of the training programmes. However, the importance and objectives of the packages have been mentioned in packages written by the Director. There are many changes in the areas covered in the packages of the three years, for example the number of units included in the packages vary from year to year.

Variations in the content areas have also been observed. In the year 2008-09, the areas covered at primary stage were English and mathematics, while at upper primary stage it covered English, mathematics, science and social science. In the year 2009-10 two additional areas – Hindi and EVS were covered at primary stage while Hindi and Sanskrit were covered at the upper primary stage. During the year 2010-11 whole Part (A) containing 36 modules covering general topics have been added along with Part (B) which covers different subject areas focusing on activity based approach. Even though it also covers activities related to different subject areas, there is a shift from subject specific training to general training focusing on the latest areas of concern such as NCF-2005, RTE, ABL, ALM, BALA, Yoga, etc.

Though the recent package contains a large number of topics without systematic classification of areas, some of the topics appear to be overlapping, e.g. NCF-2005 states that Health and Physical Education including Yoga should be considered holistically and not in the fragmented approach which is the case here. Some of the important areas which were considered important earlier could not find a place in the existing one. Most of the modules need updation both in terms of content and transaction process keeping in view the constructivist approach and reflective teaching highlighted in NCF-2005. The module written in 2006-09 mentions using small groups

of four persons each as the transaction strategy which was found missing in the year 2009-10.

Again in the year 2010 mention was made of group work, that too on page 348 (last page). However, some of the modules do talk about activity based learning and co-curricular activity as topics of the transaction package and not as transactional strategies. Some of the module needs conceptual clarity.

The material was prepared in 2008-09 and 2009-10 for 10 days training programme having two modules for primary and four primary and six for upper primary respectively. In 2010-11 the number of training days have been reduced from 10 to 8 whereas number of modules proposed for primary and upper primary have been increased to 46 which is beyond justification. The time required for transaction of these modules in training programme is insufficient.

The modules of all the three years do not explain the evaluation procedure. At places there are references to self evaluation of individual modules. There is no mechanism of getting feedback from teachers as well as from students.

The packages currently in use do not discuss which module to be transacted at primary and upper primary level. There is a need to review this package in terms of priority areas, time required for transaction and evaluation and feedback. It is suggested that split up model may be kept in consideration while reviewing the modules.

Table 3.19 summarizes the status of alignment of the training package to the SSA guidelines.

The training package titled *SAMARTHYA* follows SSA guidelines to some extent. The package has two sections. Section A deals with general topics containing 36 areas whereas Section B deals with academic aspects containing ten areas.

Table 3.19
Alignment of the Package for Primary and Upper Primary Teachers to SSA Guidelines

<i>SSA guidelines</i>	<i>Assessment</i>
Use of Constructivist approach	Not covered explicitly
Reflective Teacher	The package does not provide scope for teacher to be reflective while teaching
Split up Model	Split-up model not mentioned
Training Format	Not suggested
Areas covered in the training	The packages include modules related to health and hygiene, peace education besides training in basic subjects like language, EVS and Mathematics. Arts and Craft and Work Education have not been covered. The cover page of the package and the content given under Part I and Part II does not match.
Training Needs Identification	Not suggested
Suggested Reading/List of Audio and Video Programmes	Out of 46 modules included in the package, only four modules (No. 7, 11, 20 and 24) have included the suggested readings. One module (No.7) has given a list of references, whereas module No.11, 20 and 24 contain both references and websites.

The package covers a large number of areas, however, areas like Arts and Crafts and Work Education have not been covered which is part of SSA guidelines. The base material published during 2006-07 contains one module on Adolescence Education, comprehensively, whereas in the recent package published in 2010 this area is deleted. It is suggested that the module should be used for training of teachers of upper primary stage. It is appreciated that even over a period of time new topics namely, moral education, ABL, NCF, 2005, RTE, 2008, ALM, BALA, etc. have been added.

MAHARASHTRA

In-service training of teachers has undergone some changes during the last three years in Maharashtra. As per SSA guidelines split up model with 10-day block training complemented by 10 one-day monthly training in CRCs is envisaged. Several training packages prepared by the MSCERT were used for training during 2008-09, 2009-10 and early 2010-11. These packages were mostly driven by the expressed training needs of teachers and some of these were based on supply needs emerging from the NCF - 2005 and SSA guidelines 2008.

On a pilot basis *JIVAN VIDHYA* training has been introduced since 2010-11 in addition to 2-day CCE and 2-day ADEPTS training covering all teachers.

The expert group constituted by the state coordinator, Maharashtra state, for the 'National impact of in-service teacher training under SSA on classroom transaction' met on 26-28 April 2011 to assess the training packages for the last three years (2008-09, 2009-10 and 2010-11). The training packages for core training targeting all the teachers were in focus for assessment. *Jeevan Vidhya* training resource material was the book entitled *Jeevan Vidhya* (Marathi version) by Shri A. Nagaraj of Bhajanashram Amarkantak. The assessment is based on the modules and other material used in the training packages, various documents provided by the SPO, interaction with state, district, block and CRC level functionaries and teachers; and training observation by the field investigators.

In-service Training Pattern in Maharashtra

During 2008-09 and 2009-10, block in-service training of 10 days followed by 10 monthly one-day training was provided in the CRCs to all

5,33,000 and 4,47,928 primary and upper primary teachers, respectively. The training is based on the curriculum revised in 2004 and SSA guidelines 2008. All subjects and special content areas for Classes I-VII have been covered. Block training of 10-day training at the BRC followed by 10 monthly one-day training at the CRC was organized. In 2010-11, 2 days training in CCE and 2 days training in ADEPT were provided for all 5,33,000 teachers.

Training in *Jeevan Vidhya* focusing on development of balanced and better human beings was organized in 2010-11. This 8-9 days training covered 3700 teachers and other district and block level functionaries in 33 district level programmes from October 2010 to February 2011. This training was provided by one intensively trained resource person for each of the programme. The resource persons received 9 months training in Chhattisgarh. In one of the programme at Mojhari in Amravati district 100 persons (64 special teachers, 8 mobile teachers, 19 district level functionaries, 2 block level functionaries, 2 speech therapists and 5 subject experts) received training.

Aurangabad training *Shivir* included 49 KGBV headmistresses. In Paithan 27 primary and upper primary teachers received training while Solapur *Shivir* covered 84 (63 teachers, 12 BRC coordinators, 1 Education officer, 1 BDO and 4 principals.) Obviously, the size of the training *Shivir* and background of the trainees vary a lot. The training radically differs from other in-service training programmes as it did not address the issues and training needs in subject content and pedagogy as is done in most other states.

The Pattern of In-service Teacher Training

The pattern of in-service training of primary and upper primary teachers emerged from the SSA guidelines and the policy shift by the Government of Maharashtra. The emerging pattern of training has been summarized in table 3.20 below.

Change Indicators in Modules for Primary and Upper Primary School Teachers for Three Years

In 2008-09 and 2009-10, the training was focused

Table 3.20
Pattern of In-service Training of Teachers in Maharashtra

Subject	Number of days of Training at BRC		
	2008-09	2009-10	2010-11
English (Classes I-VII)	-	05 Days District level	-
Maths /English (Class I)	-	10 Days Block Level	-
		09 Days Block Level	-
Maths (Classes I-VII)	-	05 Days District level	-
		10 Days Block Level	
Marathi, Hindi, Sanskrit, History, Civics, Geography (Class VII)	-	06 Days District level	-
		10 Days Block Level	
Maths /Science(Class VII)	-	06 Days District level	-
		09 Days Block Level	
Marathi, Hindi, Maths, Science and Others (Class VII)	06 days District level	-	-
	09 Days Block Level		
Arts, Physical Education, Work Experience (Class VII)	06 Days District level	-	-
	12 Days Block Level		
English (Class I-VII)	-	-	-
Mother Tongue, Maths, General Science, History, Civics, Geography,	-	06 Days District level	-
		10 Days Block Level	

Work Experience, Arts and Physical Education (Class VII)			
Marathi, Maths, General Science, History, Civics, Geography, Work Experience, Arts and physical Education (ClassIII)	06 days District level 09 Days CRC Level	-	-
CCE ADEPTS <i>Jeewan Vidhya</i>	-	-	2 days for all teachers 2 days for all teachers 8/9 days for selected teachers at district level.

on content enrichment. But in 2010-11 the focus was on quality improvement, evaluation procedures and attitudinal change of teachers. The analysis of modules of last three years is given in Tables 3.21.

Assessment of Training Package based on SSA Guidelines

Table 3.22 provides the status of the reflection of SSA guidelines in the training packages.

The alignment of the training packages to SSA guidelines is low. The SPO should try to address the needs arising from the implementation of the NCF Curriculum Framework 2005 and the SSA guidelines emerging from the same.

MEGHALAYA

The training package that is used in the state of Meghalaya consists of a training module entitled, 'Training Module—Elementary School Teachers' and

Table 3.21
Change Indicators in Modules at Primary and Upper Primary Stage (2008-09, 2009-10, 2010-11)

	<i>Observation/ Change</i>
Title of the training programme	In 2008-09 and 2009-10, training was focused on content enrichment but in 2010-11 there was no content enrichment training. The focus was on evaluation and value inculcation.
Objectives of the training	Objectives were not clearly given in 2008-09 and 2009-10 but they were reflected in forewords and sometimes in modules. Almost same thing repeated in 2010-11 but in case of <i>Jeewan Vidhya</i> it was not clearly given anywhere.
Areas covered	In 2008-09 and 2009-10, training was focused on content enrichment but in 2010-11 there was no content enrichment training. The focus was on evaluation and value inculcation.
Title of the modules	Training based on the philosophy of middle path called <i>Jeewan Vidhya</i> was introduced in December 2010. This training is in addition to other content and pedagogy training
Transaction methodologies, including suggestions	Lecture, Demonstration, Simulation, Questioning, Project—there is no direct mention of these methodologies. Same is the case with 2010-11.
Time required/recommended for transaction	Ten days block for all the three years.
Evaluation procedure given in the package, including suggestions	Except in one module of 2008-09, evaluation procedure is not given in any of the packages.

Table 3.22
Assessment of Training Package based on SSA Guidelines

<i>SSA guidelines</i>	<i>Assessment</i>
Constructivist approach	The approach is not reflected explicitly. It is, however, implicitly reflected in activity based learning and questioning
Reflective teacher	Incidental, not systematically applied
Split up model	2-day (CCE) + 2-day (ADEPT) learning for all teachers, <i>Jivan Vidhya</i> : 7-9 days for some teachers and educational functionaries only.
Content areas	CCE, ADEPTS and <i>Jeevan Vidhya</i> . Areas suggested in the guidelines are not covered.
Identification of training needs	Workshop of teaching was held <i>Jivan Vidhya</i> training introduced as supply and not as demand based training
Suggested reading	Not given
Audio/video programme list	Not given

a source material 'Source Material–Upper Primary Teachers'. These two packages were developed in the year 2010, by the collective efforts of the academic faculty of the Directorate of Educational Research and Training, and the District Institutes of Education and Training, under the guidance of the State Coordinator for training, SSA, Government of Meghalaya. However, it may be mentioned that prior to the year 2010, the state government did not develop any training package to be used for the In-service training programmes of the state.

The Training Module is divided into two parts: (i) A Ten-day Training Module for Lower Primary Teachers, and (ii) A Ten-day Training Module for Upper Primary Teachers. Towards the end of the module, the Social Dimension of the School and the Organizational Dimension of the School, taken from the ADEPTS (Performance Standard for Teachers) developed by NCERT has been incorporated after translating it in to the Khasi Language. The module ends with the Comparison of SSA vis-a-vis RTE norms.

Along with the Training Module there is also the 'Source Material for Upper Primary Teachers'. The main content in this is related to teaching of English, Social Studies, Science and Mathematics.

According to the information received from the State Project Director's office, Shillong, needs assessment was carried out, prior to the preparation of the training module in the year 2010. This was mainly based on research studies conducted by the DIET, curriculum and syllabus followed in the schools, by analysis of the performance of students, and views of the teachers in respect of the hard spots that they faced in the classrooms.

Training Module for Primary Teachers

The Training Module for lower primary teachers was developed for the INSET/ In-service Training Programme of ten days duration. There are 5 Units designed to be completed in 5 sessions a day each session of 60 minutes duration. The module at a glance is given in Table 3.23.

Strengths and Weaknesses of the Training Module

The strengths:

- The module which is written in English language is simple and easy to understand.
- The guidelines reflect the sequential treatment of ideas and concepts.

Table 3.23
Training Module at a Glance

<i>Units</i>	<i>Area</i>	<i>No of sessions</i>	<i>No of days</i>
Unit-1	An orientation on Active Learning	5	1
Unit-2	Teaching of EVS	10	2
Unit-3	Teaching of Mathematics	10	2
Unit-4	Teaching of Language (English)	10	2
Unit-5	Art and Craft Practice Teaching	5	1
		10	2
	Total	50	10

Note: Plenary sessions should be organized every morning before the commencement of training session.

The title of the sessions, duration, etc. related to the transaction of the module in different subject areas are reflected in Table 3.24.

Table 3.24
Training Module Break-up

<i>Title of the sessions</i>	<i>No. of sessions</i>	<i>Duration</i>	<i>Remarks</i>
Active learning			
An introduction to Active Learning	1	60 mins	Theory class
How to plan your lessons (Activity based)	1	60 mins	Practical class
Curriculum Instruction	1	60 mins	Theory class
Place of Evaluation and Assessment in Instruction	1	60 mins	Theory class
Teaching of EVS			
Objectives of Environmental Studies	1	60 mins	Theory class
EVS Skills	1	60 mins	Theory class
An Introduction to the EVS curriculum for Primary Learners (NCF - 2005)	3	180 mins	Theory cum practical class
Table for Planning and Concept Mapping	1	60 mins	Practical class
Activity based methods for transacting EVS curriculum and Associated TLM	1	60 mins	Practical class
Lesson Planning	1	60 mins	Practical class
Activity: Preparation of TLM	2	120 mins	Practical class
Teaching of Mathematics			
Objectives of Mathematics	1	60 mins	Theory class
Basic operations in Elementary Mathematics	1	60 mins	Theory cum practical class
An Introduction to the Mathematics Curriculum	3	180 mins	Theory cum practical class
Table for planning and concept mapping	1	60 mins	Practical class
Methods	1	60 mins	Practical class
Lesson Planning	1	60 mins	Practical class
Activity: preparation of TLM	2	120 mins	Practical class

Teaching of Language			
Objectives of teaching English language	1	60 mins	Theory class
Language skills	1	60 mins	Theory class
An introduction to the language syllabus for primary learners (NCF - 2005)	1	60 mins	
Table for planning and Concept Mapping	1	60 mins	Practical class
Language Curriculum Transaction	1	60 mins	Practical class
Lesson Planning	1	60 mins	Practical class
Preparation of TLM	2	120 mins	Practical classes
Art and Craft			
Need and importance to integrate art and craft in the primary curriculum	1	60 mins	Theory class
Individual activities for classes I and II	2	120 mins	Practical classes
Individual activities for classes III to V	1	60 mins	Practical class
Practice Teaching	8	400 mins	Practical classes
Total number of sessions	44		One session is not mentioned for Active learning, two sessions are missed out from Teaching of language and one session from Art and craft, two sessions are meant for inaugural programme

- The module covers different subject areas such as Active Learning, teaching of EVS, Environmental Studies, Mathematics, Language and Arts and Craft.
- The module incorporates theory and practical oriented/activity based classes.
- Emphasis on NCF-2005, especially in the teaching of EVS and teaching of language is highlighted.
- Each unit starts with objectives of teaching that particular unit.
- The module emphasizes on a variety of activity based instructional strategies like theme teaching, EVS methods, brainstorming method, Discovery learning, Inquiry learning, Integrated Instruction, Infusion model, Multi-disciplinary model etc.
- The last two days of the training programme has been kept for Practice Teaching to ensure that each participant gets sufficient time to complete at least one lesson in Language, Math, or EVS. It is also

mentioned that the performance of the teacher will be evaluated on specific performance indicators. The format covers indicators which would be able to point out the strengths and weaknesses of the teacher and would also be able to tell them about their performance and how to improve on it. This definitely will give a good feedback to the teacher.

- The module ends with final evaluation of participants which assesses the teacher on parameters, like general attitude, responsibility, initiation, leadership qualities, material preparation, practice teaching and attendance. This culminates in the teachers getting a Participant Grade Card which will also help them to know more about himself/herself.

The weaknesses :

- It is observed that the module consists of only sketchy guidelines, giving very bare minimum information.

Let us look at the following example (taken from Session-III of Day-1 on Active Learning)

Example

An Introduction on Active Learning

The resource persons will brief participants on the benefits of active learning through an interactive session. The session will cover the following:

- What is active learning?
This shows that the concepts are neither dealt with adequately nor do they contain appropriate illustrations, and provide scope to comment on prejudices on the basis of caste and gender. Such scanty guidelines may not be helpful to the resource persons who will have to transact it in the training sessions. Resource persons may also find it difficult to obtain reading materials/ content. This may hamper the quality of the programme.
- A look at the table will make us to conclude that more time should be allotted to activity oriented sessions. For example, activity based sessions like lesson planning, activity based methods for transacting EVS curriculum and Associated TLM, etc. were being allotted only one session. More time should be given to the trainees in this regard. They will only then be able to find the training effective and implement it successfully when they go back to their classrooms.
- At the end of each session, a mention is made that the following are the resources that the resource person should resort to:
Resources: Blackboard/whiteboard, marker pens, duster, LCD, laptop, power point presentation. Definitely teachers will have to rely on the blackboard/whiteboard but use of the LCD, laptop and power point presentation may not be possible in all the centres. Teachers will find it more effective if they are exposed to resources/teaching aids which are low cost and easily available.
- The module does not contain review exercises at the end nor does it contain

remedial activities for children with learning difficulties.

- No mention is found regarding the assessment/evaluation of the training programme, nor there is also a mention regarding the follow up measures to be taken regarding the training programme.
- In the module, there is a mention that reading materials will be provided to the resource persons. However, the module does not provide the list of suggested readings/materials.

Training Module for Upper Primary Teachers

With regard to Upper Primary Teachers, the day's training is divided into two sessions – morning and afternoon. Each session is of 3 hours duration to enable the resource persons to pace his/her session(s) according to individual's requirements. Table 3.25 shows the design of the training module.

Strengths and Weaknesses of the Module

The **strengths** of the module are as follows:

- The broad based objectives are spelt out :
“That at the end of the training programme the participants will be able to -
- (a) Identify the guiding principles of the National Curriculum Framework–2005.
- (b) Appreciate the need for aligning curriculum expectations, life skills and instructional objectives/evidences of learning. Plan out a project appropriate for upper primary teachers.
- (c) Have prepared lessons for Upper Primary Level, practised teaching, reflected and re-taught.”

In addition to this, the objectives for each session are spelt out.

- The module is written in English language which is simple and easy to understand.

- These guidelines contain sequential treatment of ideas and concepts.
- A look at the above table will make us to conclude that the programme is more practical oriented/activity based. Maybe this has been designed with the intention that the number of trainees will not be a large number (maybe within 25-30, which is the norm as per guidelines) so that individual attention can be given to them and the objectives of the training programme are also met.
- One session of three hours duration has been given to topics such as An Orientation on the Guiding Principles, Higher Thinking Skills, Constructivist Approach (Planning Instruction 5Es), Project based Learning, etc. The incorporation of such topics will expose teachers to new methods and strategies which will help them to re-design his/her teaching learning process and enhance student's learning.
- Last two days of the training programme

like in the module for primary teachers, has been kept for Practice Teaching. The main objectives are that the trainees will be able to put into practice the newly learnt concepts, techniques/tools through simulated teaching, to be able to evaluate their own teaching and reflect, review and re-teach.

The weaknesses:

The module like in the previous one consists of only very sketchy guidelines.

- Each session in the module has only such guidelines. The concepts are therefore not elaborated with illustrations or examples. The module therefore needs to be enriched with content, examples, and illustrations to equip the resource persons in taking up the sessions. However, it is felt that the module should deal these topics in a more elaborate way, to be able to provide more inputs to the Resource Persons.
- Teachers used blackboard/whiteboard but LCD, laptop and power point presentation

Table 3.25
Design of the Training Module

Day	Morning (9:30 am to 12:30 pm)	Lunch	Afternoon (1:00pm to 4:00pm)
1	Registration of Orientation of Training Programme		An Orientation on the guiding principles of NCF-2005
2	Life Skills for Upper Primary learners	-do-	Bloom's Taxonomy and Higher Order Thinking Skills
3	Planning Instruction (5E's)	-do-	Determining learning indicators
4	Project based learning steps	-do-	Activity on planning a project
5	Teaching of language at Upper Primary level	-do-	Demonstration lessons (Language and Planning for a language lesson)
6	Teaching of Mathematics at Upper Primary level	-do-	Demonstration lessons (Math and Planning for a Math lesson)
7	Teaching of Science at Upper Primary level	-do-	Demonstration lessons (Science and Planning for a Science lesson)
8	Teaching of Social Science: History, Civics and Geography at Upper Primary level	-do-	Demonstration lessons (Social Science and Planning for a Social Science lesson)
9	Initial practice Teaching and Reflection	-do-	Initial Practice Teaching and Reflection
10	Re-teaching	-do-	Re-teaching

were not used. Teachers will find it more effective if they are exposed to materials/teaching aids which are low cost and easily available.

- The module, like in the previous one, does not contain review exercises at the end of each module nor does it contain remedial activities for children with learning difficulties.
- It is observed that there is no mention regarding the assessment/evaluation of the training programme or a mention regarding the follow up measures to be taken after the training programme.
- The module, like in the other one, does not provide a list of suggested readings/materials.

Source Material for Upper Primary Teachers

The source materials are related to the following subject areas:

1. Teaching of English
2. Teaching of Social Science
3. Teaching of Science
4. Teaching of Mathematics

Teaching of English

The overview of this section aims at strengthening the teaching and learning of English and developing communicative skills among students

of the Upper Primary level with special reference to child centred approach. Session one relates to briefing the teachers with the objectives of teaching the English language. This is followed by the different methods to be used such as and story telling, role play, pronunciation drill, vocabulary etc.

The second session relates to higher order thinking skills such as using the textual material to develop student's analytical and critical thinking and interpretative comprehension, developing values and attitudes dramatization and preparation of lesson plan, etc.

This is then followed by eight model lessons for Classes V to VIII, on Prose and Poetry taken from school textbooks.

Teaching of Social Science

An exemplar time table is shown in Table 3.26.

The source materials then has model lessons for Classes V, VI and VII.

Teaching of Science

The source materials begin with an introduction, objectives, skills to be developed in children, methods of teaching science and instructional strategies for teaching science. It ends with the different kinds of evaluation procedures which should be made used in the classroom. This is then followed by model lessons for Classes VI to VIII.

Table 3.26
Exemplar time table of teaching of social science

Day 1	Introduction to Social Studies	Time	Remarks
Session 1	Concept, aims and objectives of teaching social studies as per NCF 2005	30 mins	Note: For Day 1= 330 mins
Session 2	Higher order thinking skills	60 mins	
Session 3	Preparation of a lesson plan for instruction in social science	60 mins	
Session 4	Interactive session	60 mins	
Session 5	Demonstration lesson and participant observation	60 mins	
Session 6	Evaluation	60 mins	
Day 2	Preparation of a lesson plan for instruction in social studies		(duration is not mentioned)

Teaching of Mathematics

As in the previous cases the source material begins with an introduction, then it highlights on the basic instructional objectives of the resource book, the methods to be generally used in teaching Mathematics. This is then followed by model lessons for Class VI mainly.

Strengths of the Source Material

The strengths are as follows:

- The source material is written in the English language which is simple and easy to understand.
- The model lessons contain the objectives of teaching, methods, activities, teaching learning materials and evaluation procedure to be followed.
- It emphasizes an orientation on the Guiding principles of NCF - 2005.
- The source materials contain approaches such as Bloom's Taxonomy and Higher Thinking Skills, constructivist approach (Planning Instruction 5Es), project based learning, critical pedagogy, collaborative learning.

Suggestions

Based on the above analysis, the training package can be further improved if some of the following suggestions are incorporated:

- The training modules for both the levels may be written in a more elaborate and exhaustive manner. One way is by incorporating in it illustrations and examples drawn from the local surroundings, and also the experiences from outside the school which could supplement the knowledge of text books/discussions in the classroom.
- More time should be allotted for activity oriented sessions. For example activity based sessions like lesson planning, activity based methods for transacting EVS curriculum and associated TLM, etc. were allotted with

only one session. More time should be given to the trainees in this regard. Only then they will be able to find the training effective and implement it successfully when they go back to their classrooms.

- Though the module for lower primary education has a unit on art and craft, yet this can be improved if art education is to be introduced in a more holistic manner where it also includes a variety of folk and classical forms of music, dance, theatre, puppetry, clay work, visual arts and heritage crafts which contribute to the development of self, both cognitive and social. Arts such as drama, dance, drawing, painting needs to be taught as a medium of self-expression for the child. It should also develop the aesthetic sense among students. Craft as a productive process, a wonderful indigenous technology could be used as part of art education and should be taught as a creative and aesthetic activity and as work as well.
- The module for the Upper Primary level may be enriched with teaching-learning of Health and Physical Education where teachers may be provided training in organizing well-tested exercises, games and sports depending on the age and level of the students.
- The source materials may contain sufficient materials in respect of – An Orientation on the Guiding Principles of NCF 2005, Bloom's Taxonomy and Higher Thinking skills, constructivist approach (Planning Instruction 5Es), Project based learning, critical pedagogy, collaborative learning, etc. This will give proper and more effective guidance to the Resource Persons.
- The source material emphasizes on the teaching of English, however this can be modified as teaching of languages, where emphasis will be laid on the importance of

the mother tongue (home language) and the 3-language formula thus emphasizing on the importance of the multilingual education which is an important resource for children's learning.

- The process in which the child learns and the role of the teachers as facilitators of learning, and how to move beyond the textbook may be included in the module.
- At the Upper primary level teachers may be exposed to Education for Peace which nurtures ethical development with values, attitudes and skills required for living in harmony within oneself and with others including nature. This aspect can be focused upon by incorporating strategies such as stories, anecdotes, games, experiments, discussions, dialogues, value clarification, examples, analogies, metaphors, role-play and simulation which are helpful in promoting peace through teaching-learning.
- As mentioned in the NCF - 2005, teachers may be oriented with the policy of Inclusion, which ensures the participation of all children in all spheres of their life in and outside the classroom. Teachers need to understand and put into practice that schools need to become centres that prepare children for life, and also ensure that all children, especially the differently abled, children from marginalized sections, and children in difficult circumstances get the maximum benefit from the educational system.
- The quality of the module may be further improved, if it contains review exercises and sessions on continuous and comprehensive evaluation.
- Reference of supplementary reading materials, both in print and non-print materials like audio, video and multi media

needs to be incorporated in the training package.

NAGALAND

Under SSA, there is a provision for providing in-service training to all teachers for 20 days as per guidelines issued in the split-up model of in-service teachers training programmes. In this model 10 days block training is followed by 10 one-day monthly training at the Cluster Resource Centre (CRC). However in the state of Nagaland the nature, duration and content have not been changed. Certain recommended areas such as art and heritage craft, health and physical education, work education and education for peace, besides training in basic subjects like language, EVS and Mathematics are not covered. Other important areas like continuous and comprehensive evaluation (CCE), inclusive education and right to education (in light of RTE Act, 2009), etc. are also not covered. There is no training package for upper primary stage.

The State Council of Educational Research and Training (SCERT), Nagaland in collaboration with UNICEF developed a training package for in-service training for teachers in the year 2002-2003 under the title 'Thematic papers and session plans for mass teacher training programme'. The objective of this venture was to shift from prevailing teacher-centred one-way transmission to a learner-friendly, activity based mode of learning in all classrooms in the state.

The training package used for in-service teacher training was assessed by a team of expert group in a workshop from 18 to 20 May 2011 using the guidelines mentioned in the SSA Framework (Revised 2008).

As stated above, the training package 'Thematic Papers and Session Plans for the Mass Teachers Training Programme' is meant for Classes I to IV and some units have been prepared for training purpose based on activity/experience

based learning. The same training package is being used by the state government till date.

The training package of Nagaland is confined only to Classes I to IV covering 10 thematic areas, namely, New Pedagogy, Psychology, EVS (Environmental Study), Language (English), Mathematics, Management, TLM (Teaching Learning Materials), Evaluation, Planning, and Community Participation.

The package is divided into two parts, each to be presented in 24 sessions in six days each. The first part deals with pedagogy, psychology, classroom management objective of teaching/reading EVS, language and mathematics. Each is supported by statement of objective, Activities that can be undertaken (or experiences to be provided), material, needed for conducting the sessions, as also discussion points.

Part II of the package deals with some topics in Content areas for Classes (I to IV). Other areas discussed are evaluation, planning and community participation. The package is supported by an activity bank.

The main objective of the package was to lead teachers from teacher-centred and teacher-controlled methods of teaching to child-centred, activity/experience based learning-teaching.

The following points are discussed in the module:

- Beliefs and assumptions about the child
- Beliefs and assumptions about learning
- Beliefs and assumptions about the teacher
- Nature of the child and how children learn
- Stages of child development with reference to cognitive growth, social emotional and language development

Table 3.27
Assessment of Training Package based on SSA Guidelines at Primary Stage

<i>SSA guideline</i>	<i>Assessment</i>
Constructivist approach	The training package does not use the word 'Constructivist approach', but experiential and activity based ones have the potential to apply to it.
Reflective Teacher	The addressing of this issue is not explicit
Split-up Model of SSA	SSA split-up model is not followed since there are no CRCs
Training Areas There are 10 thematic areas in the training package containing the topics on:	
1. EVS	
i. Water – Class I	ii. Directions and Sides – Class II
iii. Things around us – Class III	iv. Material and their properties – Class
v. Parts of my body	vi. My sense organs
vii. How my body works, keeping it clean	
2. Languages	
i. Structured Items – Class I He/She	
ii. Structured Items – Class II Behind/ In-front/Near	
iii. Use of Sometimes/Often/Never/Always – Class III	
iv. Comparison of objectives – 'er' and 'est'/ the most – Class IV	
3. Mathematics	
i. Whole Numbers/Numeral	ii. Numbers in 100
iii. Place Value	iv. Addition
v. Multiplication	vi. Decimal
vii. Plain Figures	viii. Fractions

4. General Areas	
i. Planning	ii. Evaluation iii. Community iv. New Pedagogy
5. Psychology	
i. Nature of the Child Learning	ii. Stages of Child Development
iii. Beliefs and Assumptions about the Child	iv. Nature of Learning
v. Assumptions about Teachers	
6. Language	
i. Home and School Language	
Language Development in Early years/Development of speaking and listening skills.	
7. Mathematics	
i. What is Mathematics?	ii. Fear of Mathematics
iii. Mathematics in daily life	iv. Beauty of Mathematics
8. EVS General Methodology – Three Sessions	
i. Environmental Studies as a subject	
ii. Critical Thinking, Problem Solving and Scientific Attitudes, Skills of observation, gathering and clarifying information and drawing simple inferences (Scientific Methods, love and concern for nature, etc.)	
9. Management	
i. Classroom Management – Factors that influence classroom management	
ii. How to create a suitable teaching-learning environment?	
10. TLM	
i. Concept and Importance of TLM	
ii. Types of Teaching Aids and preparation of the same with locally available material	
Identification of Training Needs	The TNA process is not mentioned in the training package
Local Content and specificities of teaching learning modules	This is reflected in the training package
List of suggestive reading Audio/Video	Not given

This is followed by concise but clearly stated write-ups about favourable environment in the classroom, needs and interest of the child and suitable methods/approaches to be adopted for teaching of language (first language), mathematics and EVS. Other areas discussed in details in the package are: Development and use of TLM, Evaluation and Planning, Classroom management, etc.

The specific feature related to this training package is reflected below:

Training Package based on SSA Guidelines for Primary School Teachers

Table 3.27 provides assessment of training

package in the context of SSA guidelines at primary stage.

SSA Guidelines (2008) emphasise the transactional methodology on constructivist approach which is child-centred teaching-learning process. The training package does not use the word 'Constructivist approach', but there is great emphasis on experiences and activities on to learning. There are some topics in general which stimulate/develop critical thinking, problem solving and scientific attitudes, skills of observation, gathering and clarifying information and drawing simple inferences (scientific methods,

love and concern for nature, etc.) which corresponds to SSA guidelines.

Since the training package was developed in 2002-03, it does not take into account the recommendations of NCF-2005. However, the package promotes activity based learning and making teachers reflective. The package is divided into two distinct parts of 6 days each but there is no indication of the training programme to be split into two parts. What is being implemented at present is 5 days training followed by 5 days of school based monitoring and supervision at school level by the resource person (TOT- Trainer of Teachers). There is no mention of training with respect to art, heritage, crafts, health education, etc. No list is available on readings or audio or video programmes.

The package indicates a shift from the traditional teacher-centred one-way transmission of information to a learner-friendly, activity/ experience based learning. There is provision for oral and material based activities, using locally available materials. A few examples are provided for various activities in each curricular subject – language, Maths, EVS. Guidelines are given to teachers for preparation and use of TLM such as

flash cards, models, charts, flannel board, etc. One unit on 'Evaluation and Planning' and another on 'Classroom Management' are also given. Guidelines are also given to teachers as how to evaluate students and manage the class effectively. Also there is a unit on 'Community Participation' that reflects how the community and parents can be involved in school activities and how PTA and community resources can be used. On the whole, the material given in the package was relevant to the period of 2002. It is still relevant but more needs to be added. The format of the package provides details of transaction for each session, such as objectives of the topic to be covered, how the session has to be planned, and how much time to devote to different activities in the session, discussion points and the material to be used during teaching. All this is given in a tabular form to facilitate implementation by the teachers in the class.

Activity bank is also given but activities listed do not mention the grade for which the same are relevant.

Table 3.28 lists the strengths and weaknesses of the training package of 2010-11.

Table 3.28
Strengths and Weaknesses of the Training Package of 2010-11

	<i>Strengths</i>	<i>Weaknesses</i>
Training objectives	Clearly written	NIL
Language of the training package	Easy to understand	- Spelling errors - Some questions are vague
Presentation of the training package	- Good presentation with appropriate examples - Activity/experience based	- Training package is not in sequential form related to the grades
Practicability and implementability within the given time	- reasonable - local TLM is recommended	
Content of training package	Content included from Classes I to IV.	• Training package was developed in 2002 for lower primary. • Upper Primary grades left out
Transactional methodology suggested in the package(s)	- Child - centred - Activity/experience based	Not given
Methods suggested for evaluation of training programme	-	Not given
Follow up of the training programme	Activity bank is given for the teachers	The suitability of an activity for a particular grade is not given.

From the evaluation of the training package, one may draw the following conclusions:

- The training package was developed for Classes I to IV, but it was also used for training teachers upto Upper Primary Stage.
- The package was developed in 2002-03, but was used in subsequent years without modification.
- The focus of the training programme was related to language, mathematics, ECCE, TLM, Evaluation and IED of 10 days duration, but the actual training was organized for 5 days duration and accordingly the package was not adapted.
- Activity bank contains several activities which are difficult and time consuming. However, the package should be revised based on TNA and NCF-2005.

ODISHA

Primary School Teachers

Under Sarva Shiksha Abhiyan (SSA) there is provision for providing in-service training to all teachers for 20 days. As per SSA guidelines split-up model of in-service teachers' training is being followed. In the split-up model, 10 days training is organized at the training centres (block level) and remaining 10 days are completed at cluster level in the form of CRC level meetings. However, in the state of Odisha this split-up model of training is not followed. In 2010-11, 5 days training was given on mathematics at a stretch and in another phase, 5 days training was given on science to the same teacher in the same academic year at BRC. Like this 10 days training is divided in two phases in the same year.

Integrated Training Packages

In 2009-10, an integrated package on the following themes was developed by SSA, Odisha. This package was prepared for both primary and

upper primary teachers. The package consisted of (i) Education of the Girls, (ii) Multigrade and Multi-level Training (Unmesh-4), (iii) Training package on Integrated Education, (iv) Education of Socially and Culturally Backward Children. The details of these modules are as follows:

Education of the Girls

This package is prepared for primary teachers. It consists of five modules which are to be transacted in two days. Training needs of the teachers are not assessed for preparation of these modules. Though objectives of each module are mentioned, the content continuity is not present.

As explained earlier, there are 5 modules in the package and in each the methodology like group activities, open discussion and role play, etc. are suggested for transaction of the modules.

Supplementary text is suggested in most of the modules for better understanding. Though time required for transaction is mentioned, it needs 12 hours to transact the above modules.

Constructivist approach is not followed in construction or transacting the modules. A lot of additional learning input is provided in the package.

Suggestion for Improvement

- The objectives of each and every module require to be more specific.
- A preface is required at the beginning of the package to know in detail about the package.
- It requires continuity with the content of the training package.

The learning outcome of the training package is to be evaluated either at the end of each module or at the end of training package.

Multigrade and Multilevel Teaching (Unmesh 4)

This training package developed during the year 2009-10 contains 16 modules with 20 sections

and is transacted in 5 days. The objectives of the modules are mentioned in the package. Each module needs 1½ hour for transaction. But the content of the modules is so vast that it requires at least 7 days for transaction of all the modules of the package. The modules emphasise on transaction through group activities, play-way activities and role play activities.

Training Package on Integrated Education

The package consisted of 12 modules which were transacted in 5 days during the year 2009-2010. Suggestions for number of resource persons for transacting the package in a centre are not mentioned. The training needs for writing this package is assessed through discussion with the trainees in earlier trainings. On the basis of assessment of needs the modules are developed.

This package contains the following modules.

1. *Difference between challenged groups:* Time required for transaction of this module is 1½ hours which is sufficient. Achievement of the trainees of this module is evaluated with group discussion and a questionnaire.
2. *Identification and use of specific strength of challenged children:* Time suggested for transaction of this module is 1½ hours which is quite insufficient. It requires at least 3 hours for completing the module. It is evaluated through group activities and role play strategies.
3. *Knowing skills of learning and use in Teaching-learning process:* Like module 2, it is necessary to allot 3 hours time for successful transaction. But it is allotted 1½ hours only. The evaluation procedure is not clear in the module.
4. *Various subjects in the curriculum:* One and a half hours time is given in the package for transaction of this module. This much time is also insufficient for proper transaction.

The evaluation of trainees regarding this module is not specified.

5. (i) Process of Evaluation for the challenged children, (ii) Teaching Aids for the different types of challenged children.
6. Time required for transaction of this module is not mentioned in the package. However, for successful transaction, it requires at least 4½ hours. Process of Evaluation of the module is not suggested. It is necessary to evaluate through activities.
7. *Rights of Children – Create Awareness on Rights of Challenged Children:* Like Module-5, time required for transaction is not mentioned in the module. But it requires at least 3 hours for successful transaction of this module. This module can be evaluated through group activities.
8. *Identification of causes for success in learning of children:* Time required for transaction of this module is given 30 minutes. But, it requires at least 1½ hours for transaction. Evaluation can be done through group activities.
9. (i) Needs of differently challenged children, (ii) Identification of challenged children with different symptoms, (iii) Making schools barrier free, and (iv) Different acts for challenged children. Time required for transaction of this module is not mentioned. Since, it is the longest module, it requires at least 1½ day, i.e. 6 sessions or 9 hours to complete this module. Evaluation strategies are also not suggested. It is needed to evaluate through presentation and group activities.
10. (i) Assistive devices (ii) concerns for challenged groups, and (iii) classroom management.

For the above modules, time required for transaction is not mentioned. It also requires at least 3 sessions or 4½ hours to complete.

11. *Learning Strategies for differently challenged children:* Like module 9 above, time required for transaction is not mentioned. It may be needed for at least 4 sessions or 6 hours for presentation.

No specific emphasis is given to constructivist approach. The training package which is transacted in 5 days is insufficient and requires to be enhanced to 10 days.

- The package is well structured to meet the needs of trainees, i.e. the sequence of the content is well organized. The package contains very few remedial activities for the different categories of challenged children.
- No review exercises at the end of most of the modules are given.
- The follow up activities are to be in-built in the training package.

Education of Socially Disadvantaged Group

The training package for primary school teachers related to social and cultural background of socially disadvantaged group is being transacted in two days. The package consists of five modules. Number of resource persons needed is not mentioned in the package. On the basis of needs of the teachers this training package is prepared.

This package was developed during 2009-10 with the following modules.

Title : Understanding the social and cultural Background of SC and ST.

Specific hours to transact the module are not mentioned in the package. However, it requires at least two hours for proper transaction. No evaluation procedure is suggested in the package.

Title: Understanding the regional song, regional story and regional dialogue. Like module one above, no specific time for transaction is mentioned. It

may need about two hours to complete this module too.

Title : Teaching through Regional Language and learning Second Language

Time required to transact this module is not mentioned. Since, learning second language at primary level is difficult, this module may require about 3 hours (both theory and practical aspect) for successful transaction.

Title : Identification of strength of the children and application while teaching in the classroom.

Time required is not indicated. This module should be transacted through practical activities in 1½ hours.

Title : Knowing the educational planning of minority community.

Time required for transaction is not mentioned. However, it may need 1½ hours for successful transaction.

There is no indication in the package for the evaluation of learning outcomes of the trainees. It is necessary to mention the procedure to assess the learning outcome through different means.

1. The training package has no specific approach to teaching. It should be written on constructivist approach.
2. The package is transacted in two days. This seems to be quite insufficient. It needs one more day for better transaction.
3. Yes, the package meets the needs of the trainees and contains sequential treatment of ideas.
4. Language of the package is appropriate and a lot of activities and group discussions are suggested in the package.
5. No review exercise at the end of each module is suggested. At the same time, no reading material is suggested at the end of the package.

Training Package for Science Teaching

A training package in science was developed for the primary teachers in Odisha during the year 2009-10. Its name was *Anwesana -I*. It was used for training during the year 2009-10 and 2010-11 to cover all primary teachers of Odisha. This package is meant for training in 5 days at the BRC. This package consists of 17 modules which are integrated content with pedagogy. Four resource persons are to be drawn from the panel of DRG members for training in each centre. For development of the package need assessment was done in the year 2008 in the training centres through interaction with the teachers when training programmes were conducted on *Udaya* (1, 2, 3, 4). That programme comprised teaching of mathematics, science, geography, history, civics, and their pedagogy. On the basis of hard spot identified at the district level, a consolidated package of modules was prepared. The objectives of the training package will:

The primary teachers will

- develop their science knowledge.
- be able to use the science textbook effectively in the classroom.
- guide the students to develop their scientific knowledge.
- assess the learning outcomes in science.

The training package discusses content cum methodology for each module but the general themes are not discussed. The modules follow constructivist approach to teaching. It also emphasised conceptuality and specificities in teaching-learning situation. It does not include suggested readings, educational aids and video programmes for teachers. The modules emphasise values enshrined in the Constitution of India, used simple and understandable language and appropriate transactional methodology. There is deficiencies in appropriate illustrations, facilitate activities based training, arouse interest and

sustain interest in the trainees, review exercises for gifted children or remedial materials for learning difficulties. It does not suggest follow up activities after training.

Training Package for Mathematics Teaching

A training package in mathematics was developed for the primary teachers in Odisha during the year 2009-10. Its name was “Sambhav -1”. It was used for training during the year 2009-10 and 2010-11 to cover all primary teachers of Odisha. This package is meant for training for 5 days at the BRC. Four resource persons are to be drawn from the panel of DRG members for training in each centre. It is observed that the need assessment of the training is done analyzing the performance of teachers in mathematics in earlier general orientation programmes of teachers and the content analysis of primary school mathematics. Based upon the training needs, the training package is developed by the experts of State Resource Group (Odisha Primary Education Programme Authority - OPEPA). The training package contains 12 modules (9 from the content and 3 from pedagogy).

The training objectives contained in the package are:

- To enrich content knowledge of teachers in mathematics.
- To enable the teachers how to use mathematics textbook effectively in the classroom.
- To guide the students properly in enhancing their knowledge in mathematics.
- To promote the teaching competency of teachers in mathematics using activity-based method.
- To evaluate progress of the trainee in mathematics.
- To eliminate fear complex from the minds of children.

- To create interest among them towards learning mathematics.

Training package contains the following modules:

Content Based : 1. Numbers, 2. Factors and Multiples, 3. Division, 4. Common Fraction, 5. Decimal Fraction, 6. Time, 7. Geometrical concepts, 8. Perimeter and Area, 9. Solids.

Pedagogy Based: 1. Aims and objectives of teaching mathematics, 2. Inductive and deductive method of teaching mathematics, 3. Analytic and synthetic method of teaching mathematics.

- In order to conduct the training programme, the package suggests that resource persons will be drawn from District/Block Resource Centres without any indication of their numbers. However, the field investigators who are already in the training centres have reported that 3-4 resource persons are involved in the training programme. The training packages have a little scope for using specific situations and constructivist approach. Further it does not suggest any additional readings/references or educational audios and video programmes for teachers.

Conclusion

The three training packages assessed and analysed above lead to the following conclusions:

1. SSA, Odisha follows splitup model of training in two phases at the BRC level; 5-day each in one phase so the training packages are prepared for 5-day duration.
2. Need assessment is done for training through discussion and writing the modules in all the cases at the district level during earlier training programmes.
3. Time schedule or time available for transaction of each module is not planned properly.
4. In some of the packages specific objectives of the modules are clearly mentioned and

in other modules they are not mentioned clearly.

5. Each module contains the content and the pedagogy to be followed in integrated manner.
6. Use of ICT is not found anywhere in the modules. It should be in-built in the modules for better transaction of the modules during training.
7. Teacher evaluation is not found in each package. There should be several modes of evaluating the teachers. This is to be looked into and its feedback should be used by the authority.

Upper Primary Stage

Training Package for English Teaching

A training package for teaching English for upper primary stage was developed by SSA Odisha in the year 2008-09. The title of the package was 'Training Module on English'. It was used for training all upper primary teachers during the year 2008-09 in Odisha. This package is meant for training for 5 days at the BRC. Assessment of training needs through survey is not done for its content but simply based on experience the modules are selected and written. The objectives of the training package are:

- Developing teacher content knowledge, English language skills, and teaching skills.
- Mainly four basic skills like listening, speaking, reading, and writing and expansion of vocabulary.
- Helping teachers adapt supplement textbooks – how to teach structure-based old textbooks in communicative approach.

The areas of contents are listening, speaking, reading, writing, vocabulary, teaching skills, lesson planning following learner-centred and activity-based approach making the class interactive.

Suggestions for Improvement

- There should be provision for helping low proficient learners in a class.
- Teachers should be helped to handle wide range ability group learners in a class.
- The materials need to be carefully developed with worksheet to make the class learner centred and to prevent transmission loss.
- Need for follow up reading materials.
- Conclusive Remark: The introduction to the package does not fit with the contents of the package. The introduction talks about remediation, survival kit, CD, and teacher's handbook but there is none of these in the package.

Training Package for Science Teaching

A training package in science was developed for the Upper primary teachers in Odisha during the year 2009-10. Its name was *Anwesana - 2*. It was used for training during the year 2009-10 and 2010-11 to cover all upper primary teachers of Odisha. This package is meant for training in 5 days at the BRC. It consists of 18 modules which are integrated content with pedagogy. Four resource persons are to be drawn from the panel of DRG members for training in each centre. For development of the package need assessment was done in the year 2008 in the training centres though interaction with the teachers when training programmes were conducted on *Udaya* (1, 2, 3, 4). That programme comprised teaching of mathematics, science, geography, history, civics, and their pedagogy. On the basis of hard spot identified at the district level, a consolidated package of modules was prepared. The objectives of the training package are as given.

The primary teachers will

- develop their science knowledge
- be able to use the science textbook effectively in the classroom.

- guide the students to develop their scientific knowledge.
- assess the learning outcomes in science.

The training package discusses content cum methodology for each module but the general themes are not discussed. The modules follow constructivist approach to teaching. It also emphasized contextuality and specificities in teaching learning situation. It does not include suggested readings, educational aids and video programmes for teachers. The modules emphasise values enshrined in the Constitution of India, used simple and understandable language and appropriate transactional methodology. There are deficiencies in appropriate illustrations, facilitate activities based training, arouse interest and sustain interest in the trainees, review exercises for gifted children or remedial materials for learning difficulties. It does not suggest followup activities after training.

Training in Mathematics Teaching

A training package in mathematics was developed for the upper primary teachers in Odisha during the year 2009-10. Its name was *Sambhav -2*. It was used for training during the year 2009-10 and 2010-11 to cover all primary teachers of Odisha. This package is meant for training in 5 days at the BRC. Four resource persons are to be drawn from the panel of DRG members for training in each centre. It was observed that the need assessment of the training was done analyzing the performance of teachers in mathematics in earlier general orientation programmes of teachers and the content analysis of primary school mathematics. Based upon the training needs, the training package was developed by the experts of State Resource Group (Odisha Primary Education Programme Authority - OPEPA). The training package contains 13 modules (10 from the content and 3 from pedagogy). The objectives of the training package are:

- To enrich content knowledge of teachers in mathematics.
- To enable the teachers how to use mathematics textbook effectively in the classroom.
- To guide the students properly in enhancing their knowledge in mathematics.
- To promote the teaching competency of teachers in mathematics using activity-based method.
- To evaluate progress of the trainees in mathematics.
- To eliminate fear complex from the minds of children.
- To create interest among children towards learning mathematics.

Training package contains following 13 modules:

Content Based: 1. Brackets and natural numbers, 2. Integer, 3. Rational numbers, 4. Decimal fractions, 5. Angle, 6. Circle, 7. Ratio and proportion, 8. Percentage, 9. Median and heights of triangle, 10. Data Processing (Tabulation, Graphical presentation of data, etc.)

Pedagogy Based: 1. Aims and objectives of teaching mathematics, 2. Inductive and deductive method of teaching mathematics, 3. Analytic and synthetic method of teaching mathematics.

In order to conduct the training programme, the package suggests that resource persons will be drawn from District/Block Resource Centres without any indication of their numbers. However, the field investigators who were already in the training centres have reported that 3-4 resource persons are involved in the training programme. The training design has little scope for using local situations and constructivist approach. Further it does not suggest any additional readings/references or educational audios and video programmes for teachers.

- SSA, Odisha follows splitup model of training in two phases at the BRC level; 5-day each in one phase so the training

packages are prepared for 5-day duration.

- Need assessment is done for training through discussion and writing the modules in all the cases at the district level during earlier training programmes.
- Time schedule or time available for transaction of each module is not planned properly.
- In some of the packages specific objectives of the modules are clearly mentioned and in other modules they are not mentioned clearly.
- Each module contains the content and the pedagogy to be followed in integrated manner.
- Use of ICT is not found anywhere in the modules. It should be in-built in the modules for better transaction of the modules during training.
- Teacher evaluation is not found in each package. There should be several modes of evaluating the teachers. This is to be looked into and its feedback should be used by the authority.

RAJASTHAN

In the state of Rajasthan the nature, duration and content have changed substantially between 2009 and 2011. Different types of varying duration in-service training are going on to cover content areas with different purposes. Most of these trainings have been out-sourced.

At the upper primary level, science and mathematics kits have been procured by the state and against the target of 11,240 schools, only 7100 schools have been covered by 2010-11. The training modules prepared for in-service education of science and mathematics teachers at upper primary level to enhance their skills to use mathematics and science kits provided by the SPD to selected schools were assessed by an expert group in a workshop from 21 April to 22 April

2011 using the guidelines provided by the Principal Investigator of the national study as tool number one.

At the primary level, an activity based training programme LEHAR (Learning Enhancement Activity in Rajasthan) has been designed for Classes I and II. It is introduced in selected schools in different phases. The schools are selected on the basis of criteria of school size, facilities and teachers deployed. At present the number of schools covered under the LEHAR project is 10,560 against the target of 12,780. Obviously, the coverage in both projects is rather limited. The modules being used for LEHAR project schools to train teachers in Classes I and II were also assessed. The assessment was done against the backdrop of SSA guidelines.

The Pattern of In-service Teacher Training

The pattern of in-service training of primary and upper primary teachers is emerging from the SSA guidelines and the policy shift by the Government of Rajasthan. Table 3.29 provides a change over time.

The split-up model of in-service training of teachers has emerged from the SSA guidelines 2008. It envisages 10 days of block training complemented by 10 one-day training session at the CRC level. In 2008-09, this model was followed with the only exception of 8 one-day training at the CRC level. In 2009-10, it changed further. The block training of 10 days was reduced to 6 days with no training at the CRC level. During 2010-11, 6 days training was followed by 3 days block training with no training at the CRC level.

At the upper primary stage, 10 days block training was followed by 8 days of one-day monthly training at the CRC level in the year 2008-09. In the year 2009-10, the block training was reduced to 6 days followed by 8 days of one-

day monthly training at the CRC level. In the year 2010-11, 3 days block training each for science and mathematics with no monthly training at the CRC has been envisaged.

Obviously, there is drastic reduction in the block training days and virtual elimination of one-day training at the CRC level. At present, only block training is organized and CRC meetings are not used for academic purposes. CRC meetings are held only for information flow between the SPO and the schools.

Training Package for Primary School Teachers

Only LEHAR modules, used for training teachers in Classes I and II, have been assessed. As has been indicated earlier, LEHAR programme has been expanded in phases in the state of Rajasthan. At present it is confined to only Classes I and II. Teachers teaching Classes III and IV are not covered. The content of the training, its objectives, suggested transaction and evaluation have been specified in Table 3.29.

Table 3.29 indicates a few changes over three years covered by the study. The programme nomenclature and the module nomenclature are the same but have undergone changes during 2009-10 and 2010-11. It used to be titled 'Teachers Training Module for Primary Teachers' in 2008-09 while in the year 2009-10, it was titled LEHAR (Learning Enhancement Activity in Rajasthan) and during 2010-11 it is LEHAR for Classes I and II. During 2008-09, Computers, Hindi, Mathematics, English and Science were introduced whereas in the years 2009-10 and 2010-11 training was provided in Hindi, English and Mathematics for Classes I and II.

The analysis raises several issues. First, the schools are selected on the criteria of school size, physical facilities, TLM and number of available teachers. Single teacher schools, schools with limited facilities and schools with fewer teachers

Table 3.29
Change in Modules for Primary School Teachers

	2008-09	2009-10	2010-11
Title of the Training Programme	Teachers Training Module for Primary Teachers	LEHAR, Learning Enhancement Activity in Rajasthan	LEHAR, Learning Enhancement Activity in Rajasthan for Classes I and II
Objectives of the training	To provide activity based teaching of primary school curriculum	To train teachers on activities based Learning	(i) To understand the concept of training package (ii) Activity based training Programme
Areas covered	Introduction of Computers • Hindi • Mathematics • English • Science	Training in Hindi, English and Mathematics for classes I and II	Training in Hindi, English and Mathematics for Classes I and II
Title of the modules	Teachers Training Module for Primary Teachers	LEHAR, Learning Enhancement Activity in Rajasthan	LEHAR, Learning Enhancement Activity in Rajasthan
Transaction methodologies, including suggestions	• Activity based teaching learning • Use of TLM	Activity based Transaction on (i) Card Sheet (ii) Development of content based on milestones.	(i) Milestone based activity for Maths and English (ii) Development of content based on milestones.
Time required / recommended for transaction, if any	6 days	6 days followed by 3 days of second training	6 days followed by 3 days of second training
Evaluation procedure given in the package, including suggestions	In some units evaluation is given as in-built part but procedure and format of evaluation is not given. Suggestions not included.	Not given	Procedure and format of evaluation of training package given. Suggestions not included.

are neglected. They need in-service training and on site professional support more than the selected schools. When and how they will be covered by in-service training is marked by ambiguity in the SPO. The policy is silent on this. This issue needs to be addressed immediately. Secondly, LEHAR is confined to Classes I and II. What happens to Classes III to V and teachers teaching these classes is not known. The visit to classes with LEHAR in primary schools was revealing. Classes III to V were very traditional marked by flow of information from teachers to students. While in the same school Classes I and

II were alive and colorful with display of children's work. One wonders why teachers from Classes III to V could not learn from Classes I and II teachers and adopt classroom practices to make their classes lively. The package as well as the state policy on in-service primary teacher training is silent on this crucial issue. The SPO and the Government of Rajasthan need to take a closer look at the issue. The purpose of SSA is to change all primary schools but this approach is contrary to the main objective.

The module indicates only six days of training to the primary teachers covered by LEHAR.

Discussion with the SPD and the training staff in SPO revealed that six days training is followed by three days training in second year, but the additional three days training was also reported to be organized in the same years. In that event the training becomes nine days training. It is not clear whether this was complementary training or additional inputs. The suggestion by the training in-charge was that the three days of additional training was used for clarifying the problems encountered by the teachers in changing classroom practices according to the first block of six days training.

Training Package for Primary School Teachers

Table 3.30 provides an assessment of the modules used in in-service training in LEHAR project.

The module on LEHAR project follows SSA guidelines (a, b, c and d) to some extent. The package covers subject areas like EVS,

mathematics and language but other subjects like art and heritage, health hygiene and physical education and education for peace as suggested in the SSA guidelines are not covered. There is no formal training needs assessment. It seems that supply side in the form of LEHAR instead of demand side requirement of primary teachers is the determinant of the training module. The immediate environmental context and learning situations are used in activities for better learning. The audio/video programmes and suggested books are not listed in the model.

Training Package for Upper Primary School Teachers

Table 3.31 indicates changes over the three years of training packages included in the project. During 2008-09 the modules covered English, science and mathematics that were revised in 2009-10. In 2011-12, English training has been excluded and training is confined to the use of science and

Table 3.30
Assessment of Training Package based on SSA Guidelines

<i>SSA guideline</i>	<i>Assessment</i>
Constructivist approach	The training package reflects occasional application of constructivist approach in teaching learning process in some topics in (i) Mathematics (ii) Hindi and (iii) English as well as evaluation procedure and the format of the training.
Reflective Teachers	The training package provides space for teacher reflection in the project based training.
Split-up Model of SSA	The suggested split-up model is not fully followed. There is no mention of 3 days training programme as a follow up of six days. The training programme schedule in the module (LEHAR) is given for six days whereas the SSA guideline suggests 10 days in split-up module.
Training Area	Training package 'LEHAR' activity in Rajasthan for the year 2010-11 does not cover the subject areas (i) Art and heritage crafts (ii) Work Education and Education for peace directly but have been incorporated as in-built activities in the units of the modules. EVS, mathematics and language for Classes I and II are covered.
Identification of Training Needs	The training programme reflects supply side rather than demand side through TNA.
Local content and specificities of teaching learning modules	LEHAR project takes into account the local contextuality. The coverage however is confined to a small number of project schools and that too in Classes I and II.
List of suggested reading, Audio/Video	A list of suggested reading, audio / video programmes for the teachers is not provided in the training package

Table 3.31
Change Indicators in Training Package for Upper Primary School Teachers

	2008-09	2009-10	2010-11	Observation/Change
Evaluation procedure given in the package, including suggestions.	Course Evaluation Sheet. Unit wise In-built evaluation. Evaluation through pre-post test.	Course Evaluation Sheet. Unit wise In-built evaluation. Evaluation through pre-post test	Review includes assessment / Evaluation	Instead of course evaluation sheet individual and group review has been used for evaluation
Time required / recommended for transaction, if any.	10 days*	6 days	3 days for each, i.e. for Science and Mathematics <i>Note:</i> It is assumed that the training days have been utilized as per suggestions given in module	Ten days block training during 2008-09 was reduced to six days training in 2009-10 and 3 days in 2010-11
Transaction methodologies, including suggestions, if any.	Explaining and Demonstration. Activity with demonstration. Introducing the Subject Discussion and Explaining Interaction.	Explaining and Demonstration. Activity with demonstration. Introducing the Subject Discussion and Explaining Interaction.	Introducing the session. Explaining with examples. Activities, Demonstration on use of kit material. Feedback review Discussion and Interaction. Interaction + with Resource person (outside classroom)	Activity based with deductive approach and two way interaction.
Title of the module	Teacher Training Module in English, Science and Mathematics.	Teacher Training Module in English, Science and Mathematics.	Use of Science / Mathematics kit and Training handbook	Science and Mathematics module nomenclature has changed to kit based.
Areas covered	English Preparation for Training Schedule for Training Registration form Teacher Evaluation Sheet Role of trainers/Resource Persons Training Methodology Consonant sounds Word Stress and language game Structure Items Pronunciation Determiners Course evaluation sheet	English Total 12 units (i) Six units are about the Module: Preparation for Training Schedule for Training Registration form Teacher Evaluation Sheet Role of Trainers/Resource Persons Training Methodology School vision (Group work, My school stories, Teachers role, Sensitivity training	(i) Understanding nature of the Subject (ii) Activities using the kit related to Science and Mathematics Teaching	In English package there is more elaboration of Sounds and activities in 2009-10 than in 2008-09. In Science and Mathematics the organization of the training content is activity based and not topic based.

	2008–09			2009–10			2010–11	Observation/ Change
	Pre-Post test Science General topic includes My school, Stories about Lehar, vision of School Teaching Science without science lab, Units of Biology, Physics and Chemistry covered.			School Environment Role of SSA in School Effective communication Right to Information Teacher helpline Child right English for teacher English is fun: Radio programme Lehar (ii) Units covered - English Objective Articles Unit plan and Lesson Plan Vocabulary building Teaching stories Sounds in detail Reading Comprehensive Composition Structure Items Tenses Active passive Indirect speech Modals Use of Rhymes TLM preparation Pre-post test Science General topic includes My school, Stories about Lehar, Vision of School Teaching Science without science lab Units of Biology, Physics and Chemistry covered.				
Objectives of the training	Not Stated	To provide teacher training in science at upper primary level	Hard Spot Discussion	Not Stated	To provide teacher training in science at upper primary level	Hard Spot Discussion	(i) To enable teachers learning teaching effective through suggested reading	During 2008-09 and 2009-10 objectives were not stated explicitly. Hard spots/removing problems encountered by the teachers were solved by activity-based demonstration by the trainers in 2010-11 whereas in 2008-09 and 2009-10 these were explained through discussion approach

	2008-09				2009-10		2010-11	Observation/ Change
Title of the Training Programme	Teacher training module in English	Teacher training module in Science	Teacher training module in Mathematics	Teacher training module in English	Teacher training module in Science	Teacher training module in Mathematics	Use of Science / Mathematics kit and Training handbook	Science and Mathematics Kit based training was imparted in 2010-11. However English Training was not organized during 2010-11

*Subject wise 10 days training was provided to subject teachers in the teaching of English, Science and Mathematics

mathematics kits procured and supplied by the SPO to the selected schools. The number of schools covered by the project is miniscule in terms of total number of schools to be covered. The training of science and social science teachers has not been covered during 2010-11. In schools where science and mathematics teachers are not available the other teachers have been trained. The efficacy of use of these kits by social science and language teachers is to be studied. The issue is the phasing of the supply of kits and coverage of all teachers. There seems to be no plan at this stage.

Objectives of teaching English were not stated in the modules in 2008-09 and 2009-10. In the modules to provide training in the use of science and mathematics kits, the objectives can be inferred from the foreword but they were not explicitly stated in the module.

The areas covered have undergone some changes in the English package. Sounds have been covered in more detail than in earlier years. In modules for 2008-09 and 2009-10 the transaction methodology is through explaining demonstration and discussion. In 2010-11, the transaction methodology was activity based with deductive approach and two-way interaction. It covers the stages of introducing the session, explaining with examples, activities and demonstration of the use of kit material, feedback, discussion and interaction. The time duration has been reduced from 10 days during 2008-09 to six days in 2009-10 and three days in 2010-11 for each of the subjects of science and mathematics.

During 2008-09, course evaluation was used along with built-in evaluation. During 2010-11, review of each of the session included assessment and evaluation.

As per Table 3.31, the training programme conducted in the state has been evolved based on the modifications in contents in English, Science and Mathematics in 2010-11 over 2008-09, 2009-10. The last column of the table indicates changes of different elements (see column 1) which show that the modalities of training have been made more explicit for providing training in Science by using Science and Mathematics kits. Science and Mathematics module nomenclature has changed to kit based. However English training was not organized during 2010-11 whereas it was conducted in 2008-09 and 2009-10. In the year 2008-09 and 2009-10 objectives of the training programme were not stated explicitly in training module whereas this aspect was covered in 2010-11. Hard spots/ removing problems encountered by the teachers were solved through activity based demonstration by the trainers in 2010-11 whereas in 2008-09 and 2009-10 these were explained through discussion approach. Further, improvement has been made in transaction methodologies including suggestions through activity based demonstrations with deductive approach and two-way interactions. So far as duration of block training is concerned, in 2010-11 it has been reduced to three days whereas in 2009-10 it was for six days

and ten days in 2008-09. The procedure of evaluation was changed. Instead of course evaluation sheet individual and group review has been used for evaluation.

Table 3.32 is based on the SSA guidelines specified in the first section on primary education in this regard.

Constructivist approach is covered in 2010-11 modules to some extent. The subject suggested in SSA guidelines other than science and mathematics has not been covered. The coverage of all teachers teaching different subject areas in upper primary schools continues to be an issue. There is no policy and plan providing a holistic view.

The training packages for primary and upper primary levels of in-service training present micro-view in terms of mini experimental interventions and not a holistic in-service teacher training programme. The discussion with the SPO and her team revealed serious thinking and good ideas in the development of SSA in-service

teacher training programme, but a clear policy and plan are yet to emerge.

TAMIL NADU

In-service training is one of the key components of Sarva Shiksha Abhiyan (SSA). Tamil Nadu has adopted a model of in-service training with 10 days training at block level (BRC) and 10 days at cluster level (CRC). The 10 days training at BRC level are conducted almost simultaneously throughout the state in all the blocks. But the training given is spread out throughout the year in 6 to 7 sessions of 1 to 3 days, except in the case of training given in collaboration with British Council for English language teachers, where it is for 5 days duration in two phases.

Training Package for Primary School Teachers

The number of days of training programme organized at BRC level is not uniform. But more than 10 days of training has been given to teachers

Table 3.32
Assessment of Training Package based on SSA Guidelines at Upper Primary Stage

<i>SSA guideline</i>	<i>Assessment</i>
Constructivist approach	Partly, activities to be undertaken using kit material and the use for clarifying concepts in Science and Mathematics are given. There is scope for going beyond the suggested activities, possible here, not been explored
Reflective Teacher	There is space for teachers to reflect and take activities to higher level.
Split-up Model of SSA	In 2008-09 the training was formulated for 10 days. In 2009-10 the training programme was formulated for 6 days Ten days in 2008-09, 6 days in 2009-10, there is no training in English for the year 2010-11 and 3 days training in the use of science and mathematics kits each.
Subject areas	i. Art and Heritage Craft: not covered ii. Health and Physical Education: Not covered iii. Work Education: Not covered iv. Education for Peace: Not covered
Identification of Training Needs	No formal assessment of training needs was done. The supply side training, linked to the use of science and mathematics kits supplied to selected schools, was organized.
Local content and specificities of teaching learning modules	There are references to local context and situations in the community environment in order to supplement the kits with locally available resources/ materials.
List of suggested reading Audio/Video	Not given

except in the year 2010-11. This was possibly due to the inconveniences caused because of Census work and Assembly elections in Tamil Nadu for which teachers were deployed. Besides, the content of the in-service training shows the evolving scenario of the school education in the state of Tamil Nadu.

The areas covered are wide and need based. There is a stress on Activity Based Learning (popularly known as ABL approach), a participatory and inclusive teaching-learning approach pioneered by Tamil Nadu for Classes I to IV. The state has made an effort to take the teaching learning approach from cards (as followed in ABL approach) to textbook based teaching learning approach followed from Class VI onwards, called as Activity Learning Method (ALM approach). The training given to teachers who teach Class V focuses on helping them to bridge the teaching learning in the class from ABL approach to ALM approach. The state has coined a new term called 'Simplified Activity-based Learning Method' (SALM) which exclusively focuses on teaching learning in Class V. Thus the different topics covered in the training programmes include not only enrichment of use of ABL cards as well as use of SALM approach for teaching all subjects, namely, Tamil, English, Mathematics, Science and Social Science. In addition training is also given on use of ABL methodology for Integrated Education for Disabled (IED) children as well as on health and sanitation (in association with UNICEF).

Various training packages prepared covering the above areas have been introduced/revised in different years – 2008-09, 2009-10 and 2010-11. The details are given in Table 3.33.

Features of Training Packages

ABL –English Enrichment Training for Primary Teachers

The English enrichment materials prepared by the SPD experts are based on ABL with ample illustrations enjoyable both to the teacher and the children. Although objectives are not specified,

the intended objective of the package is to develop communicative language skills in English through use of basic grammar. The different areas covered are:

- Pronunciation, syllabification, word order; framing questions and habitats; Kinds of sentences, Parts of speech, Conjunctions, Word order, Teaching of logos and vocabulary in the ABL cards.
- The grammar contents are given just like in a textbook. No teacher activities are suggested. Contents of ABL cards, key for ABL cards, are given for each logo activity listed for teachers to transact and build vocabulary. Tamil equivalents for English vocabulary are given along with syllabification. This is basically, a teacher support material on vocabulary basic grammar and use of ABL card for teaching English. It is content oriented rather than pedagogy or teacher oriented.

Trainee Worksheets for Class V

The materials were prepared by British Council in partnership with SSA, Tamil Nadu and UNICEF. This is meant for Class V English language teachers. The main intended objective of the 15 modules of this package is to help teachers to enable primary school children to speak English with confidence and to improve their communicative skills especially among rural children. This package includes worksheets to be used by children for sharing ideas from one's own experiences in groups. Self evaluation format is also provided. The worksheets provide scope for variety of learning experiences in and out of the classroom. The package enumerates different web sites for further reference.

Teacher Development Programme for Class V

This is meant for Phase II of the training programme. The 13 modules included in this

package are intended to enhance confidence and competency of Class V English teachers to transact the prescribed syllabus for English language effectively. This material includes drills and exercises based on personal experience of the trainees for classroom transaction. The teacher is expected to act as a facilitator. This package includes suggested web sites for teacher's reference.

Self-learning Materials for Mathematics (26 Modules)

The self-learning materials for Mathematics focuses on all mathematical concepts related to

basic computational skills and decimals. The focus is on how they can be learnt through simple steps of ABL method. The steps of SLM are methodical – right from testing the previous knowledge (application of Ausubal's Advance Organiser Model), preparation, objectives, practice, remedial measures and usage of various apparatus/learning materials which includes cards, games, spindle boards, blocks, emery papers, boards, abacus, beads, etc. Exercises given are interesting. In multigrade situation and frequent absenteeism by students such self-learning materials are real compensatory packages. More

Table 3.33
Details of Training Packages Prepared from 2008-09 to 2010-11

Title of the package	Subject/ Area covered	No. of days of Training (year wise) and whether revision was made			No. of modules
		2008-09	2009-10	2010-11	
ABL -English enrichment training for for primary teachers	English	(2) √ (Introduced)	Not used	Not used	2
Classroom language – Trainee work sheets (prepared by British Council and SSA) for Class V teachers	English	-	(5) Phase I	No change	-
Teacher development programme (prepared by British Council and SSA) for Class V teachers	English	-	(5) Phase II	No change	-
Self learning materials for Maths	Mathematics	(2) √	No change	No change	26
Draft source book for teachers (SALM)	English, Tamil, Science, Maths, Social Studies	-	(2) √ (Introduced)	Revised	5
SALM -Tamil	Tamil	-	-	(2) √ (available only for 2010-11)	-
Science Kit (I to IV)	Science	-	-	(2) √ introduced	26
Easy method of science for Class V (SALM)	Science	-	-	(2) √ introduced	8
New Approaches to Inclusive Education	IED	(2) √	Not used	Revised- inclusive education for differently abled	6
ABL enrichment	Tamil, English	-	-	-	-
Hygiene at school premises	Health and hygiene	(1) √ introduced	-	-	-

and more such SLM should be developed and applied for all subjects at all levels of school education.

Draft Source Book for Teachers (SALM)

Simplified Activity-based Learning Method (SALM) is the basic methodology presented and illustrated for teaching all subjects – Science, Social Studies, English, Tamil, Mathematics. The first version was prepared in 2009-10 and was tried out on 10 schools on pilot basis. The revision made in 2010-11 has improved version for teaching of English. Some activities related to developing thinking skill has been dropped in Mathematics. The steps followed are more or less same for all subjects except for maths. The steps include motivation, reading by students, understanding new words, underline the new words which the teacher explains, concept mapping by students with teachers' help (integrate the knowledge), presentation to a group, reinforcement activity by teacher, by relating to life experience, evaluation activities through quiz, remedial teaching, follow up/assignment. The intended objectives of this module is to make teachers understand how to make students learn by self-learning and learning by doing; and how to make students reflect, seek clarification, evaluate themselves, construct their knowledge in all the school subjects. Selected chapters from the textbooks are chosen to illustrate SALM methodology. Although this approach promotes constructivism in teaching-learning in the classroom, the content covered is overloaded for two days training.

SALM –Tamil

This training package was prepared in the year 20010-11 for Class V to facilitate teachers to read Tamil with correct pronunciation and understanding. Lesson plans have been prepared

for teaching different forms of Tamil literature-prose, poem and grammar. The suggested teaching methodology does not vary the nature of content. There is repetitiveness of steps common for all forms of Tamil literature. Training package helps in the use of prescribed textbook in Tamil. Actual lesson plans which prescribes teachers on how to transact the given content in the prescribed text book are given. Such lesson plan cover the portions for different months of the year. The common steps given in each plan include motivation; reading; comprehension where teacher reads, students repeat and teacher corrects; developing mind map; integration-summing; evaluation through asking questions; home assignment and remedial teaching. For remedial teaching no activities are suggested. Self-learning and group-work activities suggested are difficult for students to perform. There is not much focus on the justification for the use of pedagogy/approach suggested. Unless teachers are able to generalize, these types of packages get obsolete when textbooks get changed. Approach to teaching suggested is teaching by use and not by rules (Functional/Inductive). This material provides sufficient information on grammar and conversational approach. There is scope for reading, observing students' summing up, discussion with peers, oral presentation by students and writing by students. Constructivist approach is to some extent followed as activity based learning approach is suggested for teaching Tamil.

Easy Method of Science for Class V (SALM)

This package mainly focuses on helping teachers on how to make Class V students conduct experiments in science. A lot of experiments and activities are suggested putting the teacher in a facilitator's role. The directions given in the package if followed by the teacher in the

classroom will help students construct their own knowledge through reflection and inquiry. The areas covered include Pressure, Food and Nutrition. Instructions are given to teachers on how to evaluate student learning. But no activity is given for evaluation of teachers' understanding. Different activities to demonstrate the concepts are given without repetition. However, more information on related applications in daily life could have been provided as enriched material as well as for kindling curiosity.

Science Kit (I to IV)

This training package is meant for teachers teaching lower primary classes from I to IV. The intended objective is to familiarize the teachers with activity based learning in science. These objectives however, are not specified. The main content of this package focuses on demonstrating to students. Separate experiments suited to each of the 4 classes are given. Most of these simple experiments can be performed by the students in the class and the teacher has an opportunity to follow constructivist approach in the class. The usefulness of the package can be enhanced if guidance is given to the teachers while performing and interacting with the students as well as the precautions to be kept in mind while doing the experiment. Without such instructions teacher may tend to follow didactic approach while conducting the experiment without making students think and reflect on their own.

New Approaches to Inclusive Education

This training package prepared in the year 2008-09 was revised and re-titled as inclusive education for differently abled children in the year 2010-11. Although objectives are not specified, the training package provides information on the theme with sufficient illustration. The different areas covered are given below:

- Education of visual and hearing impaired children
- Mentally challenged children
- Children with multiple handicaps
- Physically disabled
- Government schemes
- Individualised instruction
- Legal provisions for disabled

In the revision, the same areas are covered with an additional topic on 'Games for differently abled'. The coverage of subjects is adequate and well illustrated. Clear instructions are given to teachers. Quick reading is promoted. Diagrams, flow charts, pictures are good and informative. English equivalent of key words is provided. Explicit account on government provisions and legal provisions serves as useful guidelines. The revised version of 2010-11 has less theory and is more compact than the previous package. It has attractive print with illustrations incorporating ABL approach with disabled children's education and use of equipment for special children.

Revision of ABL Training Package

ABL approach which has made a great impact on the teaching-learning in classrooms in primary schools of Tamil Nadu incorporates the graded curriculum through the use of well designed cards. There has been revision based on feed back obtained from the practitioners. In 2010-11, modification in ABL cards has been made and package has been prepared in 2010-11 with instructions to use the modified cards. For example, use of Sanskrit words in Tamil cards is discarded and replaced by Tamil words. Teachers have been oriented to use the changed cards.

Hygiene at School Premises

The objectives of this training package are to facilitate teachers to create healthy and clean

Table 3.34
Criteria and Aspect of Compliance

<i>SSA guideline</i>	<i>Assessment</i>
Criteria of compliance	Aspect of compliance
Constructivist approach	Provided by packages on English enrichment package, Science Experiments, Mathematics SLM, ABL cards
Opportunities to reflect	Provided by packages on Science, Maths and English
Split-up model of training	Total duration of training ranges from 8 to 14 days throughout the year; Topics are diverse over the year providing little opportunity for sharing. Further, some of the CRC meetings have also been used for training purpose instead of using them for follow up of training at BRC level.
Duration of training	Maximum of 5 days
Training in other areas	SLM Kit usage, ABL enrichment, IED programme, Sanitation, communicative skill and confidence qualities
Identification of Training Needs	Though no explicit stating of this, the materials with revisions and modifications reflect the felt need by stake holders
Contextually relevant training design	All the materials are need based and highly relevant in the evolving changes of inclusive education reflected in the teaching–learning process.
Suggested readings, Web sources	Given in some of the training packages like English and Mathematics

atmosphere in the school; to cultivate clean habits among children in day-to-day life; to join hands with villagers to create awareness among the public. The areas covered include basic needs of life and different ways to keep the premises clean. The concepts are explained with merits and demerits and ways to control so as to keep the surroundings clean as well as maintain personal hygiene. This training is meant for one day. The concept on drainage cleaning is difficult to practise in the classroom. This material was prepared in the year 2008-09 and was not revised later.

The training packages developed by the SPD TN serve the purpose of updating and enhancing competencies of teachers—both in general areas and in specific subjects. More than 50% of the packages appear to be handbooks without the typical contents of a training module. The steps/sequences adopted in developing and presenting the curricular materials for training in English Teaching are developed by British Council in partnership with SSA. All the materials comply with NCF guidelines as far as possible.

Training Packages for Upper Primary School Teachers

Tamil Nadu has adopted a model of in-service training with 10 days training at block level (BRC) and 10 days at cluster level (CRC). The 10 days training at BRC level is conducted almost simultaneously throughout the State in all the blocks. But the training given is spread out throughout the year in 6 to 7 sessions of 1 to 3 days, except in the case of training given in collaboration with British Council for English language teachers, where it is for 5 days duration in two phases. Teachers are trained in batches and subject-wise teachers are called for the training which imply that all teachers at primary level will not be exposed to such training programmes.

Coverage of Content in Training Packages over Years

Great thrust in ALM in the training programmes is given. A welcome step in the training programmes is introduction of practical activities, experiments, life related activities in the curricula.

Most of them are related to subject areas such as Mathematics, Chemistry, Physics, English, General Sciences, Social Sciences and Tamil.

In 2008-09, 14 days of training was organised for Chemistry practical, Chemistry ALM, Physics practical, Mathematics ALM, training in subject areas, ALM reinforcement and English grammar—each of 2 days duration.

In 2009-10, training was organised for ALM content, ALM enrichment, child care and development, ALM project, English grammar, ALM reinforcement, ALM social science and science experiments. In 2010-11, British Council materials in two phases were the contents of the five days training programme (for each phase). Further, a two-day training was offered in SALM in Tamil.

There are certain programmes for which materials were not prepared. It may be noted that

except in the case of British Council training, only one copy of the training package is supplied to the school and teachers do not possess their individual copies.

Various training packages for upper primary teachers were prepared covering the above areas and revised in different years – 2008-09, 2009-10 and 2010-11. The details are given in the following Table 3.35.

Features of Training Packages

Active Learning Methodology – (ALM) for Mathematics

This training package was prepared in 2008-09 and the same material was used in 2009-10 and 2010-11 without any changes. The training material does not spell out specific objectives. The contents discussed are divisibility, LCM, HCL,

Table 3.35
Details of Training Packages for Upper Primary Teachers

Title of the package	Subject/ Area	Year of Introduction/Revision			No. of days of training	No. of modules
		2008-09	2009-10	2010-11		
Mathematics ALM	Mathematics	√			2	12
Chemistry practical	Chemistry	√			2	43
Physics practical	Physics	√			2	53
Draft Source Book for Teachers – Science ALM	Science	√			2	9(11+8)
Science experiment manuals (project work)	Science and social-science	-	√		2	44 (science) +41 (S.Sc.)=85
Draft Source Book for Teachers of Social Studies	Social Science	-	√		2	6
ALM reinforcement training	General methodology	√			2	8
Bringing grammar to life in upper primary classroom	English	√			2	6
Middle school Development Programme - Master Trainer Participants worksheets-English (British Council Phase II)	English	-	-	√	5	4
Draft Source Book for VII and VIII English teachers-ALM	English	√			7 (intended) 2 (Actual)	3
Hygiene at school premises	Health and Hygiene	√			1	-

fractions, drawing lines, basic fraction activity for Class VI and triangle for Class VII. For Class VIII the contents are graph, percentage, compound interest and trapezium.

The title of the module is TIGER format of ALM; TIGER is an acronym for teaching, interaction (evocation, recalling, PK testing), group action, evaluation and remediation.

The package has several steps for transaction which involves introduction, understanding the concept, teacher solving problems followed by student solving problems, group work on challenging problems, presentation to class by students, reinforcement and homework. The evocation (motivation) part is general and not connected with content of the presentation.

Motivation step needs modification and suggestions can be given as to how it can be changed according to the content. Some of the units in Arithmetic (like fraction) can be translated into classroom practice. But units in geometry and graphs appear to be more difficult to apply TIGER approach. The content of the training package is presented in a systematic manner but it is overloaded for two days training. This package appears more as a teacher support material used by trainers during training and is not a training package where specific methodologies for trainers are implied/suggested. Follow-up of the training programme is not suggested.

Chemistry Experiments

This training package was prepared in 2008-09 and the same material was used in 2009-10 and 2010-11 without any changes.

Objectives of this package are not explicitly stated; but the implication is to develop scientific attitude among the students and provide opportunities for learning by doing through sensory experiences.

The contents covered are separation of substances, changes around us, water, acids,

bases and salts, air, transformation of substances, metals and non-metals and fundamentals for learning chemistry. The 43 modules are on titles such as magnetic separation, crystallization, sublimation, chemical changes, convection of heat in gases, preparation of soap, presence of carbon dioxide in air. These are elaborated as the procedure for experiments to be conducted. Transaction strategies are not suggested.

This appears to be more a textual material written in narrative style. The 'why' question is answered very briefly. This is more a teacher enrichment material with less explanation on process and product of the experiment. No reference is given to pedagogy or transactional methodology to be followed by the teacher. All experiments cannot be explained within two days with actual demonstration and discussion. Constructivist approach is not followed in the presentation style.

Physics Experiment

This training package was prepared in 2008-09 and the same material was used in 2009-10 and 2010-11 without any changes.

Although no training objectives are specified in the package, this training package intends to facilitate learning through experiments. The areas covered are force and pressure, motion. Various titles of the model include Pushing the pin, Atmospheric pressure, Barometer, Pressure of liquids, Magnetic forces, Convection of heat in gases, Wave motion (*Jalatharangam*).

Transaction steps are presented through an account of materials required, structure (picture), questions to be asked (for curiosity), hypothesis, instructions for carrying out this experiment and observations, questions to be asked for explanation, teacher's explanations to be given (understood) and assignment of the same activity.

Topics/titles are provocative questions and do not suggest the concepts to be learnt. Hence

title for activity and content appear to be not connected. What approach to be followed is not specifically suggested in the form of students constructing their own knowledge. Constructivist approach may be/may not be followed when the experiments are performed by the teacher. Package appears to give steps of experiments and types of questions and explanations/answers. This will only enrich teacher's concepts.

Draft Sourcebook for Teachers – Science ALM

This training package was prepared in 2008-09 and the same material was used in 2009-10 and 2010-11 without any changes.

The intended objectives are to enrich content and teaching methodology (ALM) to be used while transacting portions in science for Classes VI, VIII and VIII. This package is split into two parts:

Part I referring to portions of August-September, Part II for portions of October. An attempt is made to give exemplary/model lessons – three lessons for Class VI, two lessons for Class VII and one lesson for Class VIII. The different topics covered include nature of matter, separation of substances, changes around us, heat, self theory, atomic structure, bio diversity, simple force and motion, work and energy, light, structure of matter, our environment, metals and non-metals and anatomy of a living being. The steps of transaction include introduction, preparation of mind map, overdue of the lesson, activities to be performed by students, evaluation questions, remedial teaching and learning outcome. Evaluation questions to be used are given at the end of the package. Some of the lessons do not have evaluation questions. Most of these questions are taken from the prescribed textbook. Questions for self-assessment of teachers at the end of the lesson could have been more useful. The activities are textual and

function more as prescriptions rather than as suggestive to promote teacher's creativity in teaching-learning. Activities which students can try on their own as home projects and further learning could have been added.

Science Experiment Manuals (Project Work)

This manual was prepared in 2009-10 and used in 2010-11 as well without any revision. The package is prepared with the objective of skill development and promoting learning through systematic experience and covers areas such as ways to understand science, enhancing observation skills, observation in relation to group discussion, comparison, classification and conclusion.

The topics deal with our earth, measurement, force and motion, work and energy, separation of substances and the full portions in sciences and social sciences for Classes VI, VII and VII. There are 44 modules for science and 41 for social science. For all the three areas of science and social science, topics have been listed (not in the form of competency). For each topic a long list of various assignments/projects that can be given to students (not discriminated ability-wise) is given. The package is more like a directory of activities which the teacher can refer and assign to students. However it contains both individual and group activities. Each activity requires a lot of time and special ability training for students. The activities require students to go for field work—interview community, browsing data from internet, draw pictures of stars in the night. For example, one activity requires students to collect bacteria affected leafs and find reasons. This package is more useful for high ability students where the activities can be given as project work to be completed at home. The quality of paper and printing is not good and may not be long-standing in usage as one copy is supplied to the

school for all the teachers. These subjects are expected to be covered in two days. Assessment criteria to judge the project work of children are not found in the material.

Draft Source Book for Teachers of Social Studies

This material was prepared in December 2007 and used from 2008-09 onwards till 2010-11 without any modifications with the objective of making learning a simple process (given in the preface). The intended objective is to make teachers understand the use of ALM methodology to teach topics in upper primary classes from VI to VIII. The exemplary lessons are given for different classes in different areas such as Pallava King's rule for Class VI, Vijayanagar dynasty, education in Tamil Nadu after independence for Class VII and the topic air (effects of 'Air' on soil erosion, convection currents covered in geography) for Class VIII.

Each module can be transacted in 45 minutes with flow charts, tree diagrams and listing of major points on the chalk board as strategies. The package covers the ALM steps such as difficult vocabulary to be explained, mind mapping, summing up, discussion points (only content listed and no activity is suggested), drawing maps, evaluation questions (given in the textbook), writing answers and remedial measures.

This package looks more like a content-cum-methodology enrichment package. Steps of ALM are illustrated for difficult topics. Illustration and examples given are in verbal form. They could include pictures/drawings, for example, mind map/tree has only words entered. They could be pictorial. Activities could include use of visuals/film and field trip. Constructivist approach is not reflected because it is content-oriented and focuses on how to transmit knowledge given in the textbook – through prescribed lesson plans for selected topics, for example, the topic on cultural impact of Krishnadevaraya's rule, the

suggested methodology appears to be lecturing. Training methodology cannot be inferred from the material. This is more a teacher support material used in training programmes. Material is not directly addressed to the teachers. However, the package makes an attempt to simplify the process of teaching and learning of some difficult topics given in the textbook.

No systematic follow-up of the training is suggested. An interaction with BRTE's suggested that the follow-up includes maintenance of registers in the school and the observations and oral feedback from teachers are recorded by them in the register.

ALM Reinforcement Training

This training package was prepared in 2007 and the same material was used in 2008-09, 2009-10 and 2010-11 without any changes. The package intends to promote self-learning among students to serve as a caregiver for the students and to respect the abilities and interests of the children.

This package meant for two days training includes 8 modules written in Tamil. The objectives are specified as below.

To help teachers towards:

- (a) Motivating for self-learning;
- (b) To become a guide for the students;
- (c) Respecting the ability and the interest of the students.

The different areas/topics covered include democratic classroom, integrated lesson plan, who is a teacher, role of the teacher in introduction and remedial teaching, role of the student in learning and remedial learning, self evaluation by the students, teacher-student evaluation sheet. Explanations are given on how to perform the ALM methodology which includes the steps—introduction, understanding and integration, mind map, induction, group formation and group discussion, reinforcement, writing, revision,

evaluation and remedial teaching, reading and silent reading. It is written in narrative style on the above topics telling what to do and what not to do. There are no illustrations. What and how of mind map is given specifying its advantages. Students self evaluation proforma and evaluation of student by teacher proforma are given. No follow-up activity is suggested. The steps of silent reading and underline difficult words by the students can be translated into classroom practice, but to make students draw mind map is a challenging task. This training package is useful as a reading material of the topics covered although not having the format of the training package as suggested in SSA guidelines.

Bringing Grammar to Life in the Upper Primary Classroom

This training package was prepared by SPD office, Tamil Nadu in the year 2009-10 with a focus to strengthening English grammar at the upper primary level. It contains sufficient illustrations, explanations, pictures, drills and exercises. The duration suggested for teaching each concept is too long. The focus is more on concept enrichment and the use of these materials by the teachers may make the children passive listeners. Self assessment form for students is provided in the form of worksheets, the use of which may require guidance of teachers and the teacher may find it difficult to implement in over-crowded classrooms. However, the approach suggested is effective and informal.

Middle School Development Programme – Master Trainer Participants, Worksheets

English Language

Developed in 2010-11 by the British Council in partnership with SSA programme, this material

states the objective clearly as to developing training techniques, teaching methodology competencies, enhancing knowledge in employing interactive, child-centred teaching of English. The other objective is to develop in teachers the skills and knowledge in how to use appropriate interactive and child-centred teaching methodology to teach English and develop confidence in students in speaking English. The areas covered are skills of writing, thinking, error correction, dictation, creative and critical thinking.

Transaction strategies suggested are demonstration, situational learning and picture description. Modules deal with pronunciation booster, group micro-teaching, assessment in thinking skills, creativity and organisation, writing an open letter for Class VI, grammar booster and equality in the classroom. The activities like using journals, feedback, error correction and textbook tasks with writing activities are very interesting and though provoking.

There is a feedback proforma for evaluation. Activities suggested are related to day-to-day life. The training material is well graded and logically executed. Constructivist approach is used here. This is basically a master trainer participant worksheet. The master trainer has an opportunity to reflect on the activities given in the package and expect the same from the students.

Systematic revisions were carried out in the British Council source book for English grammar right from 2008-09. Changes were perceptible in the areas covered, transaction strategies to suit the topics with self-assessment proforma. There is a shift from content and concept based approach and constructivism.

ALM Draft Source Book for Classes VII and VIII English Teachers

This training package was prepared by SPD office Tamil Nadu in 2007-08 and used in all the three

Table 3.36
Compliance with SSA Guideline by the Packages (2010-11)

<i>Criteria of Compliance</i>	<i>Aspect of Compliance</i>
Constructivist approach	Provided by the packages to some extent – Physics experiment, Chemistry, Science Experiment, ALM draft source book for English
Reflective Teacher	Opportunity reflection is provided by the packages to some extent in ALM Mind Mapping, Chemistry, Physics, Science experiments, Mathematics
Split-up model of training	Total duration of training range from 8 to 14 days throughout the year; Topics are diverse over the year providing little opportunity for sharing at CRC level. Further some of the CRC meetings have also been used for training purpose instead of using it for follow up of training at BRC level.
Duration of training	Maximum of 3 days only except in the case of British Council Training where it is for 5 days
Training in other areas	ALM reinforcement for competency updation, Sanitation in schools (Monthly subject oriented)
Identification of training needs	Materials are need-based, recent, requirement of teachers are considered
Contextually relevant Training design	All ALM materials, Practical experiments, English skill development
Suggested readings, Web sources	Only very few materials suggest further reading and resources

years upto 2011 without any revision. The intended objectives for teaching English prose, poem and grammar are given. The different topics for Classes VI, VII and VIII that are taught in the month of November 2008 are used for illustrating ALM methodology. Bilingual method is used for teaching prose and poem, for example, for teaching poem, the steps followed are Tamil summary, meaning in English and Tamil for new words, introduction, guided reading, mind map, consolidation, enrichment activities, discussion and revision.

The given table suggests the compliance of SSA TN training package (prepared for upper primary teachers) with NCF guidelines to some extent. The training materials prepared by British council in collaboration with SSA are more in line with constructivist approach highlighted by NCF guidelines.

Comparison of Training Packages

Most of the materials used for training were developed during 2008-09 without further revisions. Table 3.37 reveals the duration of

training days with the year of introduction/ revision of the curriculum in various areas.

The ALM source books for Classes VII and VIII teachers of English include prose, poem with ALM approach. The source book for upper primary teachers of social studies has not been modified since 2008-09.

ALM maths resource material prepared in 2008-09 also remains without further revision. Similarly, chemistry experiments and chemistry ALM materials remain without any change from 2008-09. Materials on physics experiments are also not revised.

Manual on science experiment prepared during 2009-10 continues to be used in 2010-11 also. ALM reinforcement training material developed in 2007 has not been revised. The Master trainer participant worksheet was developed in 2010-11 and does not fall within the preview of revision.

Conclusions

The training packages developed for upper primary teachers are intended for competency updation of content and skills. The materials

Table 3.37
Comparison of Content of Training Packages of Three Years

<i>Whether the content of the training package</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>
is in line with the objectives of training	3	3	3
is free from prejudices on the basis of caste and gender, etc.	3	3	3
contains sequential treatment of ideas	2	2	3
deals with the concepts adequately	2	3	3
contains appropriate illustrations	2	2	2
uses simple and easy to understand language	3	3	3
promotes activity- based teaching	3	3	3
has potential to arouse and sustain interest of the trainees	3	3	3
suggests appropriate transactional methodology	2	2	2
contains sectional review in each module	2	2	2
contains review exercises at the end of each module	2	2	2
contains remedial activities for children with learning difficulties	2	2	2
provides a list of suggested readings at the end of each module	1	1	1
includes suggestions for follow-up activities to reinforce learning	1	2	2

provided opportunities for learner-controlled learning, individual study/activity and group work with or without teacher guidance.

- Explicit activity steps for adopting constructivist approach are missing in almost all materials.
- Master trainers' competency development is also taken care of in one of the materials which is a welcome step because this category is usually an ignored one.
- One appreciable aspect of materials on English learning is that they provide gist of the lesson in regional language to enhance understanding.
- The basic philosophy of participatory and interactive transactional strategy is reflected in all the materials.
- At the same time certain enrichment activities are time-consuming and difficult to implement. But if one feels that the training materials are suggestive and not exhaustive, a creative trainer can innovate ways of transactional approaches.

If the following suggestions are carried out, the materials will be more useful:

- (i) Specifying the objectives for each module of the training package.

- (ii) Explicit instruction on the time frame for completing each activity/experiment/module with reasonable flexibility to accommodate individual differences.
- (iii) More sequential arrangement of modules in some of the packages based on a fresh review of all the training materials.
- (iv) Suggesting appropriate transactional methodology in an exhaustive manner with a cafeteria approach for teachers and trainers to choose.
- (v) In built formative and summative evaluation spread throughout the training material will help in effective implementation.
- (vi) A thorough knowledge of 'what should be evaluated', 'how to evaluate' may be given through a one-day training to avoid subjective interpretations and to make entire process of evaluation scientific.
- (vii) The weakest aspect of which is the follow-up programme is to be given special attention.
- (viii) In fact pre-training assignment and post-training activities should be suggested to make any training meaningful and useful. This is missing in all the packages.
- (ix) Resource materials for all packages both in terms of content and approach, there are

perceptible changes in the training modules meant for upper primary teachers. Personalised, activity-oriented, learner-centred strategies are explicitly present in the materials. Still there is scope for improvement which is the basic principle of curriculum designing. Continuous conscious competency updating of teachers and master trainers will prove to be effective in enhancing quality of school education which is a must for a socialistic democratic republic like India.

- (x) It may be noted that except in the case of British Council training, only one copy of the training package is supplied to the school and teachers do not possess their individual copies.

UTTAR PRADESH

Primary Teachers

Introduction

In the state of Uttar Pradesh only two to three days training in the subjects' area like English Reading and Numeric ability was organised during 2010-11. One teacher from a school is trained. At Class I and II level mostly *Shiksha Mitra* are teaching in the state. Therefore, they received training of development of reading and numeric ability under Learning Enhancement Programme

(LEP). For English one teacher from a school is trained. All teachers do not receive in-service training every year.

The SSA guidelines envisages 20 days training split into two parts, the first one block training of 10 days followed by 10 one day monthly training at the CRC level. But SSA guidelines pattern of split model was not followed during last three years. All training programmes were subject area based.

In 2010-11 only 5 days training was organised at BRCs in the state. However, the training calendar of 2010-11 includes two trainings, one on continuous and comprehensive evaluation and other on special education which have not been organised yet. Besides BRC level training, six days have been specified for cluster level meetings. However, no academic and pedagogic issues were discussed in the meetings observed. Only the information were communicated from SPD to BRC, CRC, schools.

Training Packages for Primary Teachers

Packages used for English training (2009-10) were prepared by English Language Teaching Institute, Allahabad. Packages for Reading and Numeric Ability were developed by State Project Office (SPO), Lucknow. Training packages for the year

Table 3.38
Features of the English Training Packages used for the Training of Primary Teachers

2008-09	2009-10 and 2010-11
English • Transaction methodology of training package is not dear • Training manual was not provided. • Nature: Teachers' Handbook • Training package is divided in three sections comprised textbook-based teaching lessons for Classes II, III and IV. • At the end of each lesson a life skill or value is highlighted.	English : Introduction in the form • About the Module' has been added • Objectives are clearly spelled out in the over view section. • Training package is bilingual (English and Hindi). • Training package is divided in four sections: 1. Characteristics of English language 2. Development of English language skills 3. Teaching of the structure of English language 4. Vocabulary and pronunciation • Teaching plans for Class I-V are given. • Module is activity based with practice oriented style

- Plan for Multigrade teaching was explained with matrix of class and group organisation.
- Different evaluation approaches such as oral /written questions were explained. Types of evaluation questions were explained with examples.
- Illustrations are few and small sized.
- There are few spelling mistakes highlighting the scope for improvement of the text.

2008-09 were prepared by SCERT and SPO. During the year 2010-11 total three packages one each for English, Reading Ability, and Numeric Ability were used. Two days of training were for reading and numeric ability and three days were suggested for English. Three resource persons per training centres were assigned. Training packages developed during three years 2008-09, 2009-10 and 2010-11 were assessed during the workshop held on 4.4.11 and 5.4.11. Packages were assessed in respect of their objectives of training, content, coverage, transaction methodology used, usability, and change over time.

The training package used in 2008-09 was more like Teachers' Handbook. It provided detailed description of the activities to be arranged by the teachers in the classroom. Activities were of prescriptive nature. It gave no space to teacher's imagination to create their own teaching-learning design as per the need. Transactional methodology was missing and in the absence of any training manual it seemed difficult to translate it for the training purpose. Moreover, the amount of content given in the package seems to be heavy. It seems difficult to cover within the training content stipulated period of two to three days of training.

Although the training packages used during the years 2009-10 and 2010-11 are the same, there are visible changes in these packages in several respects. Objectives of the training packages were clearly spelt out in the overview section. The module was activity based. The activities were suggestive in nature. Teachers

were encouraged to think about other similar activity. Certain points have been made clear with the examples taken from the textbook 'Rainbow'. Bilingual nature of the package helped the teachers to understand the messages and guidelines better. A separate section of the module was devoted to students' assessment. Different approaches of oral and written comprehension questions have been explained with examples. The current module has much strength in comparison to the module of 2008-09.

Training Packages on the Development of Reading Ability

There was no training for reading ability prior to 2009-10. Probably it was thought that teachers need no training for the teaching of reading Hindi. It is a fact that almost half of the students enrolled in government primary school fail to read. Against this background training for the development of reading ability was introduced for the first time in the year 2009-10 under the learning enhancement programme (LEP). Reading pedagogy was emphasized as being different from language teaching. In 2009-10 module on reading and numeric ability was combined but separate modules on each was developed. The package advocates the 'whole word approach' of reading as it is based on meaningfulness of language. It makes reading an enjoyable experience for students. The packages of 2009-10 and 2010-11 were activity-based. Language was easy to understand. Introduction of 'Reading Corner' is a new feature of 2010-11

Table 3.39
Features of the Training Packages–Primary School Teachers

2008-09	2008-09	2008-09
Reading Ability (Hindi) No training was organised	Reading Ability (Hindi) • Training for reading was introduced. • Two packages for Classes I and II were developed. • Content of package covers reading and numeric ability both. • Concepts of language, reading were discussed in brief. • Stage-wise goals were explained. • Daily plan for teaching was given • Module was activity based • Mostly illustrations are small in size, unattractive and of poor quality.	Reading Ability (Hindi) • The package was modified. • Separate package for Reading Ability was developed. • 'Whole word method' for the teaching of reading was advocated in preface of the module. • It is more organised and has two sections. • First section covers concept of language, reading, writing and its development • Second covers the plans, games, and activities to develop reading competencies among students. • Stage wise goals were explained in relation to the textbook. • Concept of 'Reading Corner' was introduced. Its use for the teaching of reading was explained. • Different plans for students' assessment such as formative observation, comparison of a student's performance at two time intervals or with stage specific goals were explained.
Mathematics/ (Numeric Ability) • Three modules for Classes II, III, and V were used. These are like teacher's handbook. • Transactional methodology was not cleared. • Packages contained textbook based lessons and explained in details. • All the packages were content dominated.	Mathematics/ (Numeric Ability) • Training for numeric ability has been introduced. • Two packages for Classes I and II were prepared. • Content of the package covers reading and numeric ability both. • Stage-wise goals were explained • Daily plan for teaching was given • Module was activity-based • Most of the illustration were small sized, unattractive and of poor quality.	Mathematics/ (Numeric Ability) • Separate package for numeric ability for Classes I and II were developed. • It was more organised and has two sections; • First section explains the nature of mathematical experiences a student should have when she/he comes to school. Module emphasises the concept of 'less and more', 'one and many', 'big-small' etc. the students already have and these are to be utilised in teaching of numeric ability. • Second section explains activities and games in practice oriented style. • Stage-wise goals were explained and daily plan for teaching was given. • Quality and size of illustrations need lot of improvement.

Training for Science • One Module for science training for Class V was prepared. It is like teacher's handbook. • Transactional methodology was not clear. • Package contained textbook based lessons.	Training for Science • No Training for Science Teaching	Training for Science • No Training for Science Teaching
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training package. Creation of reading corner and its use in teaching of reading is explained and activities of teacher and students to be organized in the reading corner are clearly spelt out. During 2010-11 package, concept of assessment and ways to assess student performance are explained separately. Different plans for student assessment such as formative observation, comparison of a student's performance at two time intervals or with stage specific goals are explained.

Training Packages on the Development of Numeric Ability

In 2008-09 there was training for Mathematics. Three Teachers' Handbooks for Classes II, III, and V were used.

Training packages changed nomenclature and emphasis from 2009-10 onwards. Now training for Mathematics became development of numeric ability. In the packages emphasis was given to the mathematical experiences already possessed by students. Teaching of numbers should take cognisance of those experiences. A total of 24 activities/games have been explained to make number learning enjoyable. Teachers are encouraged to think of other similar activities. Activities suggested are easy, implement able and contextually relevant. In 2010-11 the package has been modified for the better. It has become more organised and detailed-Stage-wise goals (in relation to textbook) with daily plan of teaching have been explained.

Suggestions for teachers on how to use textbooks in a better way are included in the package.

Training Package on Science Teaching

During the last three years only in 2008-09 training for Science teaching for primary teacher was organised. One teachers' handbook like package for class V was prepared.

Training Package for Remedial Teaching

During the year 2009-10 three days training for remedial teaching for primary teachers was organised. Title of the training package is 'Lakshya' and has three sections; first section covers remedial teaching for language. Second section is for remedial teaching of Mathematics, and third section explains pre and post-test, schedule for follow up and suggestions.

The Training Package was also assessed in the context of the compliance of SSA guidelines. Table 3.40 demonstrates the compliance.

The package developed during 2008-09, 2009-10 and 2010-11 were evaluated by experts who rated the materials in relation to certain criteria. The ratings are indicated in Table 3.41.

The training package used for INSET during 2010-11 was better than earlier one.

Table 3.40
Compliance of SSA Guidelines in the Packages

<i>SSA Guidelines</i>	<i>Packages of 2010-11</i>
Constructivist Approach	Partly covered in some units in English teaching and units on reasoning and thinking activities in numeric ability.
Provides opportunity to reflect	Packages do not provide opportunity to reflect.
Split-Up model	SSA guidelines were not followed. Subject related to short block training of 2-3 days was provided.
Training duration of 10 days	Only 5-days training as mentioned in was provided.
Training in other areas such as Art and Heritage Crafts Health and physical education, work education, peace education etc.	Not provided
Identification of training needs	No formal need assessment was done
Contextually relevant training design	Contextually relevant activity based methodology was followed in the training package
Suggested reading list and other educational audio-video programme for teachers	Not given

Table 3.41
Comparison of Content of Training Package(s) of Three Years

<i>Whether the content of training package</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>
Has been developed in line with the objectives of training package	1	3	3
Is free from prejudices on the basis of caste and gender	2	2	2
Contains sequential treatment of ideas	1	3	3
Deals with the concepts adequately	1	3	3
Contains appropriate illustrations	2	1	1
Uses simple and easy to understand language	2	3	3
Promotes activity-based teaching	2	3	3
Has potential to arouse and sustain interest of trainees	1	2	2
Suggests appropriate transactional methodology	1	2	2
Contains sectional review in each module	1	1	1
Contains review exercises at the end of each module	2	3	3
Contains remedial activities for children with learning difficulties	1	1	1
Provides a list of suggested reading at the end of each module	1	1	1
Includes suggestions for follow-up activities to reinforce learning	1	2	2

Strengths and Weakness of the Training Package

(see Table 3.42)

Overall Conclusion

Appraisal of training packages of the last three years reveals that training packages used in the year 2008-09 were significantly different from

those used in 2009-10, and 2010-11. Almost all packages of 2008-09 are teachers' handbook type, content dominated and comprehensive coverage of any module is not possible within limited time available for training. During the year 2009-10 and 2010-11 same training packages were used. These packages are the improved version of the previous ones not only in their nomenclature but

Table 3.42
Strengths and Weakness of the Training Package–2010-11 (Primary)

Aspects	Strengths	Weaknesses
Training Objectives	Clearly spelled out in English package	No differentiation between content and objectives of training in packages other than English.
Language of the training package	Easy to understand	-
Presentation of the training package	Step by step presentation is helpful	Proof reading omissions could have been avoided
Practicability and implementability within given time	Good chances of implementation in the classroom	-
Content of the training package	Content validity is reasonably good	-
Transactional methodology suggested	-	Training methodology is not spelled out
Methods suggested for evaluation of training programme	-	Not given
Follow up of the training programme	-	Not given
Any other	Training packages was revised during–2009-10	Illustrations are too small and sometimes don't contribute to understanding particularly in the module on reading.

in selection of content and transactional methodology too. Since at primary level emphasis is given on activity based learning, training packages are focused on equipping teachers to make learning activity based. Activities chosen in the English, Reading and Numerical Ability modules are interesting, implementable and contextually relevant. It facilitates teachers to link classroom knowledge with life situations which is according to the guidelines of National Curriculum Framework–2005. Though the present packages have substantial deviation from the SSA guidelines but it has improved and presentation of content is up to some extent along the line of SSA framework.

Training Package for Upper Primary Teachers

SSA guidelines pattern of split model was not followed during the last three years. All training programmes were subject area based. By implication, all teachers were not covered under

the training days added together. Subject and special area training covered teachers teaching a particular subject. There seems nothing wrong on the face of it. How teachers with changing subject allocation in the time table and those transferred during the year are covered was not clear in the training policy.

In 2010-11 only 7 days training was organised at BRCs in the state. Besides BRC level training six days were specified for cluster level meetings. But in the field there were more meetings at NPRC level for the information flow from SPD to BRC, CRC, schools and back. However, no academic and pedagogic issues were discussed in the meetings observed.

Packages used for English training during 2009-10 and 2010-11 were prepared by English Language Teaching Institute, Allahabad. Packages for Science and Mathematics were developed by State Project Office (SPO), Lucknow. Training packages for the year 2008-09 were prepared by English Language Teaching Institute, Allahabad,

Table 3.43
Features of the Training Packages in English used for the Training of
Upper Primary School Teachers

<i>Subject</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>
English	• Transaction methodology of training package was not clear • Training manual was not provided • Nature-Teachers' Handbook • Training package was divided into three sections: 1. Nature and structure of English language, and teaching- learning materials 2. Methodology of teaching English, and general instructions to teach English. 3. Third section comprised textbook-based teaching lessons for Classes VI, VII, and VIII. • At the end of each lesson a life skill or value was given. • Different evaluation approaches were suggested.	No Training for English	• About the module was discussed • Objectives were clearly spelled out in overview section. • Training package was bilingual. • Training package was divided into following sections: 1. Development of English language skills 2. Peculiarities of English language 3. Teaching of prose, poetry, composition, and structure was explained along with model lesson plans 4. Vocabulary, pronunciation, idioms and phrases, and common errors in English. • Module are activity based with practice oriented style • Different evaluation approaches were explained such as oral /written questions. Types of evaluation questions were explained with examples. • Illustrations are few and small sized.

State Institute of Science Education, Allahabad, SCERT and State Project Office. During the year 2010-11 three packages one each for English, Science and Mathematics were used. Three days of training for English and two days each for Science and Mathematics were suggested. Three resource persons per training centres were employed. Training packages developed during three years i.e. 2008-09, 2009-10, and 2010-11 were assessed during the workshop held on 4.4.11 and 5.4.11. Packages were assessed in respect of their objectives of training, content coverage, transactional methodology used, usability, and changes over the time.

The training package used in 2008-09 was more like teachers' handbook. It had description

of the activities to be completed by the teachers in the classroom. Activities were of prescriptive in nature. It gave no space to teacher's imagination to create their own teaching-learning design as per the need. Transactional methodology was missing and in the absence of any training manual it was difficult to translate it for the training purpose. Moreover, the amount of content given in the package to be covered was huge. It seems difficult to be completed within stipulated period of two-three days of training. However, a number of changes have been made in the training package used during 2010-11. There are visible changes in these packages in so many respects. Objectives of training packages are clearly spelled out in overview section. Module is activity based. Activities are of suggestive nature. Teachers were encouraged to think about

Table 3.44
Features of the Training Packages Used for Science and Mathematics Teaching for
Upper Primary School Teachers

<i>Subject</i>	<i>2008-09</i>	<i>2009-10 and 2010-11</i>
Science	Title of the Package- Teachers' Guide Science. - One package for Classes VI, VII, and VIII. - Package is divided into three sections: - First section discusses textbooks to be used in class. - In the second section textbook-based lessons and evaluation questions for students are given. - Third section deals with topics like, computer-an introduction, biographies of scientists, important dates and time table for 10 days training. - However, total training days assigned for science was 5 in the training calendar. - Transactional methodology for training was not clear. - Package was found to be content dominated and large amount of content was given.	Title of the Package-<i>Karke Sikhen Vigyan</i> - Objective of the training package is clearly spelled out in the module. - It is based on the guidelines of NCF-2005. - One package for Class VI - Content of package covers topics like our surroundings, separation of substances, measurement, change, speed, force and machines, living world and its processes, air, water, energy. - Total 31 hands on activity based on above topics are explained in practice oriented style. - Transactional methodology is discussed and time table for training is given. - Titles of the activities are attractive and capable of arousing interest of students. - Activities are explained in systematic manner; previous knowledge, objectives, procedure and required materials, conclusion. - Reflective exercises are given at end of each activity under the heads of 'let's do /make something else'. - Space and flexibility is provided in the package as activities are of suggestive nature. - Programme for follow up of training is given in the package. - Illustrations are satisfactory. - Separate instructions for teachers are given to organise the activities in the class. - Language of the package—Use of Sanskritised Hindi terms could be avoided.
Mathematics	Title of the Package—Teachers' Guide Mathematics - The package is meant for Classes VI, VII, and VIII - Package was divided into three sections: - In First section discusses textbooks to be used in the class has been discussed. - In the second section textbook-based lessons and evaluation questions for students are given. - Third section deals with the materials to teach mathematics, biographies of important mathematicians and time table for 10 days training.	Title of the Package-<i>Karke Sikhen Ganit</i> - Objective of the training package is clearly spelled out in the module. - One package for Class VI - Content of package -Total 23 hands on activity based on hard spots of mathematics are explained in practice oriented style. - Transactional methodology for training is discussed and time table for training is given. - Titles of the activities are attractive and capable of arousing interest of students. - Activities are explained in systematic manner; previous knowledge, objectives, procedure, required materials, and conclusion. - Reflective exercises are given at end of each activity under the heads of 'let's do /make something else'.

	• However, total training days assigned for mathematics was 5 in the training calendar. • Transactional methodology for training is not clear.	• Space and flexibility are provided in the package as activities are of suggestive nature. • Programme for follow-up of training is given in the package. • Illustrations are satisfactory. • Separate instructions for teachers are given to organise the activities in the class. • Use of Sanskritised Hindi terms could be avoided. • Some of the activity needs little more elaboration e.g. activity No. 8 on page 12.
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other similar activities. Certain issues have been made clear with the examples taken from the textbook 'Rainbow'. A separate section of module is developed to students' assessment. Different approaches of oral and written comprehension questions have been explained with examples.

Training Package on Science and Mathematics

The training packages have undergone significant changes from 2009-10. The packages of 2009-10 onwards and 2010-11 were the same and activity based. During 2008-09 training package was in the form of teachers' handbook or guide. One handbook each in Science and Mathematics for Classes VI, VII, and VIII was used. These handbooks contain textbook-based lessons. Transactional methodology was not spelled out clearly. But training packages changed in nomenclature, content and emphasis from 2009-10 onwards. The packages currently in use have less content in comparison to 2008-09 packages. These packages are made to deal with the hard spots in Science and Mathematics teaching. Though no formal need assessment has been done, topics have been selected for the packages on basis of informal talk with the teachers and classroom observation. Now emphasis is given to the learning of Science and Mathematics through activities. Activities are based on scientific and mathematical experiences of day to day life of students and the purpose of packages was to take cognisance of those experiences in the teaching of Science and

Mathematics. The materials on Science and Mathematics have activities which make learning enjoyable. Activities are explained in systematic manner. Previous knowledge for each activity under section 'we already know' is given and then the purpose for organising the activity is spelt out. Conclusion of each activity is given under section 'what we have learned' and at the end reflective exercises under the heads of 'let's do/make something else' are given. Teachers are encouraged to think of similar other activities. Activities suggested are easy, implementable and contextually relevant. Suggestion for teachers on how to use textbooks and to organise the activities in a better way was included in the package. Quality of illustrations is satisfactory.

Though 2010-11 packages have certain merits over previous ones, difficult Hindi terms having Sanskrit overtone frequently used in the packages could have been avoided to make it better. Description of some of the activities is jumpy which makes the concept difficult to understand, e.g. activity on decimal on page No.12 needs elaboration.

The training packages were also examined in terms of the compliance of SSA guidelines. Table 3.45 provides the details.

It is evident from Table 3.45 that there is substantial deviation from the SSA guidelines. The missing link is the one-day training at the NPRC levels which precludes mutual interaction and collaboration through sharing of good practices especially innovations in teaching.

The packages developed during 2008-09, 2009-10 and 2010-11 were assessed and rated in respect of various criteria. Table 3.46 indicates ratings:

It is evident from the table that packages used during 2009-10 and 2010-11 have more positive qualities compared to previous ones. The contents of training packages of 2010-11 were formulated following training objectives. But none of the

packages of the three years contain list of reading suggested in SSA guidelines. Remedial exercises for children with learning difficulties and sectional review too don't find mention in any of the packages. Training packages used during the years 2009-10 and 2010-11 suggest transactional methodology to some extent. Activity-based training methods have been given.

Table 3.45
Compliance of SSA Guidelines in Package

<i>SSA Guidelines</i>	<i>Packages of 2010-11</i>
Constructivist Approach	Partly covered in some units in English teaching and is followed up to some extent in the designing of activities suggested in Science and Mathematics packages.
Provides opportunity to reflect	Up to some extent opportunities are given, for example, in 'Let's Do' or 'Make Something Else' exercises.
Split-Up model Training duration of 10 days Training in other areas such as Art and Heritage Crafts Health and physical education, work education, peace education etc	SSA guidelines were not followed. Subject related short block training of 2-3 days. Only 7 days training as mentioned in table 3.3.7 was provided. Not provided
Identification of training needs Contextually relevant training design	No formal need assessment was done Contextually relevant activity based methodology was followed in the training package
Suggested reading list and other educational audio-video program for teachers	Not given

Table 3.46
Comparison of Content of Training Package(s) of Three Years

<i>Whether the content of training package</i>	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>
Is in line with the objectives of training package	1	3	3
Is free from prejudices on the basis of caste and gender	2	2	2
Contains sequential treatment of ideas	1	3	3
Deals with the concepts adequately	1	3	3
Contains appropriate illustrations	2	3	3
Uses simple and easy to understand language	2	2	2
Promotes activity-based teaching	2	3	3
Has potential to arouse and sustain interest of trainees	1	3	3
Suggests appropriate transactional methodology	1	2	2
Contains sectional review in each module	1	1	1
Contains review exercises at the end of each module	2	3	3
Contains remedial activities for children with learning difficulties	1	1	1
Provides a list of suggested reading at the end of each module	1	1	1
Includes suggestions for follow-up activities to reinforce learning.	1	2	2

Conclusion

Appraisal of training packages developed last three years reveals that training packages used in the year 2008-09 are significantly different from those used during 2009-10, and 2010-11. Almost all packages of 2008-09 were content dominated. Comprehensive coverage of any module is not possible within limited time available for training. The training package used during the year 2009-10 and 2010-11 are different not only in their nomenclature but in selection of content and transactional methodology too. At upper primary level emphasis was given on activity based learning. Training packages are focused on equipping teachers to make learning activity based. Activities chosen in the Science and Mathematics modules are interesting, implementable and contextually relevant. It facilitated teachers to link classroom knowledge with life situations which is according to the guidelines of National Curriculum Framework–2005. The presentation of content was as per the recommendations of SSA framework as it is activity based and provides space and flexibility to teachers and students to think. One serious limitation is that mechanism for the assessment of training needs is not functional. The mechanism for systematic feedback on training from the beneficiaries should be evolved to provide adequate demand based in-service training.

WEST BENGAL

In the state of West Bengal, there is a provision for 13 days training at CLRC (equivalent to BRC) level and 7 days at CRC level. In reality, however, the duration of in-service training at CLRC level is reduced to two to five days in majority of the districts. Thus, the duration of training at CLRC level varies from district to district. The assessment of training packages for primary teachers revealed that most of the packages used

by the state deviates SSA norms in terms of both contents and structures. It was further revealed that the textbooks, teachers' handbooks and modules developed by the national agencies like IGNOU have been used as training materials in some cases.

The pattern/structure of in-service training for primary level teachers for 2008-09, 2009-10 and 2010-11 communicated, from time to time, by *Paschim Banga Sarva Shiksha Mission (PBSSM)* to the district Project officers (DPOs).

The Training Package was prepared by DEP-SSA (IGNOU) in collaboration with PBSSA Mission. It has 8 modules on different dimensions of inclusive education, e.g. characteristics of identification of Children with Special Needs (CWSN), policy and legislation framework, curricular adaptation, teaching strategies and building patterns. Thus, the package seems to be comprehensive and well organised. The time of module preparation has not been mentioned in the package. The areas covered by the modules are: characteristics of inclusive education, identification policy and teaching strategies for inclusive education. To provide the information on inclusive education to the primary teachers is the prime objective of the training package. The transactional strategies, e.g. activity, group work, assignment reflect constructivist approach. The modules have been prepared in appropriate format indicating objectives, exercises, evaluation strategies and suggested readings. The package however does not indicate the duration and time for transacting different modules.

This package is a structured one, as prepared by a team of experts from IGNOU. But as per SSA guideline, the package should be based on the training needs of the beneficiary trainees. This fundamental principle of development of training modules seems to be missing. Further, the training modules need to be translated in Bengali language for their effective use. It is apprehended that both the Resource Persons as well as the trainees would

face difficulties if the modules are transacted as such, without translating them in Bengali language.

Training Package on Teaching Maxims:

Single module package meant for primary school teachers was developed in 2008-09. The module was in Bengali to be transacted in two days. The content of the module is very appropriate to develop the competency of the teacher for teaching at primary level. The maxims are related to the level of the learner at primary level. The package contains relevant teaching maxims for classroom transaction. The package provides a new colour to a teacher if he/she will follow the maxims as suggested in the package.

Training Package on Motivation: The package is a thematic one and does not bear any feature specified in the SSA guidelines. The choice of the theme, although important, has not emerged from the felt needs of the teachers. At least there is no mention of any need assessment done for the purpose. There is no mention of the objectives of the training programme to be conducted following this package. This is certainly a handicap for any evaluator to assess the contents, the processes and the overall design of the package. The language used in the package is Bengali. The overall use of language is simple and direct. The presentation style of the units in the package is uniform throughout. The contents are delivered either through lecturing or through lecture-cum-discussion methods followed by a group discussion. The content of each module is based on psychological principles of motivation and relating those to the experience of the teachers specifically to their interactions with students and colleagues. There is no provision of evaluation of the programme or the participating teachers in the package. There is no mention of any follow up of the training programme in the package.

Training Package on *Shekha-Shekhan* Upakaran Prayog: The package on has the

target group of teachers of primary school. The package has been prepared by WB Board of Primary Education. There is no mention of the objectives of the training package/programme, although it is inferred that the main objective of the package is to help teachers of primary schools in collecting/preparing teaching learning materials and using them properly in teaching different subjects in the classroom. The contents of the package are 1. Teaching-Learning Materials, 2. Subject-Based TLMs, and 3. TLMs for children with special needs. There is no mention of the process of development of the package.

This is not a training package but may be considered as a handbook of TLMs for the primary school teachers. More specifically, this contains lists of TLMs arranged subject and topic-wise for each class of the primary school.

Training Package on Integrated Learning: The training package was developed in 2008-09 and is used for primary and upper primary teachers. Therefore, the materials do not conform to the split up model of in-service training. Various chapters contained in the training material are not followed by suggested readings or audio and video programmes to supplement or substantiate the understanding of the trainees on various training inputs. The module is related to the competency development of teachers at upper primary level. It is a basic conceptual module mainly to develop the competency of the teachers for effective classroom transaction. Since it is related to the competency of the teacher it can't be transacted to the classroom.

Training Package on Mathematics: The materials of 2010-11 and 2009-10 are having sequential ideas adequately in them with appropriate illustrations. The material is in Bengali which is simple and easy to understand by the teacher/trainees. The materials are also promoting activity based teaching for lesson transaction. The material of 2010-11 is having

better potential to arouse and sustain interest of trainees rather than the material of 2009-10. In all other aspects the materials remain silent. However, since the textbooks are provided as training modules, they cannot be evaluated in the light of training module evaluation.

The materials under reference are textbooks which are used as training package for teachers. These are not in modular form and are meant for class I and Class II students. Following aspects are suggested based on observation:

Training Package on English: The training materials in primary English, though not prepared in the format of training modules, have taken into account the constructivist approach as advocated in NCF-2005. The training approach in steps and the strategies therein, detailed at the beginning of the materials (teachers' book) envisages, constructivist approach in the transaction process. If the materials are transacted properly, the trainees would be able to help learners in the construction of knowledge after training. The training package used for English has been prepared as per the content/lessons of the textbooks. The materials in the package are the teachers' guide to deal with various lessons/chapters of the textbooks rather than the training modules. Therefore, these do not conform to the split up model of in-service training, which consists of training at BRC/DIET level, hands-on exercises in the school settings and sharing of experiences. Various lessons/chapters contained in the training materials are not followed by suggested readings or audio and video programmes to supplement or substantiate the understanding of the trainees on various training inputs.

None of the training packages (for 2008-09, 2009-10 and 2010-11) are prepared in modular forms. These are in fact not prepared for the training purposes and therefore, do provide adequate information on learning objectives,

duration and transactional methodologies etc. to the trainer. Further, the methodologies do not indicate the use of modern technologies in the transaction of inputs. Lack of required information pertaining to expected learning outcomes, time, and resources to be used and transactional methods is likely to misled the resource persons on these dimensions, which may ultimately lead to wastage of time, money and labour. It can, however, be seen that the inclusion of the training material 'Teachers' Companion' in the package for 2010-11 is a departure compared to the packages used for 2008-09 and 2009-2010. The materials seem to prompt the resource persons as well as trainees to go beyond the prescribed syllabus. The stories and poems contained in the material seem to have been drawn from the indigenous literature and thus, would provide authentic learning situation to the readers for construction of knowledge.

Training Package on Girls' Education: The modules of the training package are having the objectives. These objectives are free from prejudices and have sequential ideas in the content. The content deals with the ideas adequately with appropriate illustrations using simple and easy to understand language. The modules are appropriate for the teachers at elementary level. The description on activity based teaching in the modules has less potential to arouse and sustain interest of the trainees. But there is no mention of transactional methodologies, remedial activities for children with learning difficulties. Each module contains review exercises at the end and sectional review of each section. There are a number of suggested readings at the end of each module.

The training package on girls' education was used in 2008-09 and 2009-2010 for primary teachers. No information is there about its use in 2010-11. For training of elementary teachers the language should be Bengali. Since the time of the

training is not available it is difficult to comment on this aspect. Transactional methodologies are not highlighted. This is a training package which does not indicate the follow up action. This is a good package focusing important aspects of Girls Education. But it should be translated into Bengali language since this cannot be used as such for training of primary school teachers. Secondly the title of the training programme, its objectives, duration, transaction methodologies, and evaluation strategies should be chalked out as these are essential components of a training programme.

Training Package for Upper Primary Teachers

Wide spectrum of content is covered in the package. But there is no sequence between the modules. At the middle of the module (pages 30 to 32) syllabus on disaster management for Class VI to VIII is given which has no relationship with the modules. The teachers' guide training package was developed in 2009-10. The materials are not formulated in the form of training modules. It is written as additional support textual material for teachers of classes VI to IX students. But illustrations given in the package are explanatory and can be used in the subsequent years.

Training Package on Teachers' Handbook on Cleanliness, Student Council and Disaster management; Does not follow constructivist approach: The support materials do not provide scope to the teachers to act as facilitators and to create a variety of learning experiences. The guidelines provided at the beginning of the package emphasise local contextually in teaching-learning situation and scope for assessing training needs of the teachers.

Training Package on Preparation of Competency Based Continuous and Comprehensive Evaluation in Physical Science and Life Science: The training package

has not followed constructivist approach to teaching learning as per the recommendations of NCF-2005. All the modules are mostly prospective and creative activities are not possible. The package is exclusively prepared for teachers which can develop knowledge, understanding and application ability in the teacher by self-learning. There is no scope for split-up model and scope for discussing the difficulties after working in schools. It does not contain the process of identification of training needs of the teacher by any agency.

The content of the booklets are free from prejudices on the basis of caste and gender and ideas are presented in a sequential form with adequate treatment. Since the package is in Bengali, it is easy and understandable for the teachers. The package is not full of activities and hence it may not arouse interest among the teachers/trainees. The drawbacks of the package are that it does not have list of suggested reading at the end. There is no scope for the remedial activities for the children with learning difficulties.

Training Package on English (Art of Framing Evaluation Papers): This package is not a module rather a support material for training. Only the activities during a workshop on 'evaluation and question framing' of 5 days are given. It gives only the conceptual description on evaluation framing questions. There is no detailed information about the training sessions for each unit. A little activity of group work/individual work along with discussion is given at the end of same unit. Regarding teaching learning of English, emphasis is given on instructional objectives on language skills, attitude, thinking skill. The vital parts like grammatical competence, vocabulary have received very little attention. Examples are not sufficient to illustrate each unit. It is given importance on providing feedback both in oral and written format. Sufficient illustrations are not given on rubric for evaluating oral-aural skills.

Training Package on Prashikshan Sahayika (Bengali): Although, the package was developed in 2005 and subsequently modified in 2008, the contents and processes do not reflect any of the features being promoted through SSA. This package is an example of meticulously developed teacher training package on the traditional lines for the classroom activities marked by total control and dominance of teachers. It exclusively deals with exemplars of discrete pieces of content without linking with the processes of learning. The emphasis on introducing constructivist approaches in the classroom processes as envisaged in the NCF-2005 has been ignored while developing this package.

Training Package on Revised Booklet for Annual Academic Calendar, CCE and Grading: This training package has not owed constructivist approach to teaching-learning as per the recommendations of NCF-2005. There is no scope for split-up model and scope for discussing the difficulties after working in schools. It does not contain the process of identification of training needs of the teacher by any agency. Split-up model of in-service training is not followed. The teacher does not play the role of facilitator in assessment but as a leader of assessment. The contents on instructional design can be translated into classroom practices. But the major concepts of the modules can not be translated into classroom practices.

Training Package on Constructivist Approach in Classroom Teaching Learning: Although the coverage of contents/training inputs seems to be satisfactory, the package does not conform to the norms and standards of a training package. However, the effectiveness of its use as a training package depends upon the creativity and experience of the resource person. Adequate and appropriate activities and illustrations contained in the material enhance its quality. In the hands of a qualified resource person the material would

deliver goods. There is no scope for split-up model and scope for discussing the difficulties after working in schools. The material does not contain the process of identification of training needs of the teacher by any agency. The material has not been prepared in modular form. It does not contain the objectives, time or session wise distribution of contents. It is not a training package, rather a simplified version of NCF-2005 document brought by NCERT in 2005. The activities and illustrations used in the material would, however, guide the trainees as well as resource person to make the programme activity based and participatory. The material (although not prepared in modular mode) can be effectively used for the training purpose. However, the effectiveness of the programme will depend upon the creativity and interest of the resource persons. The activities and illustrations used in the material will be of immense help to the resource person to move the programme activity based and participatory. Further, the example, including exemplar lessons, policies and reforms, derived from the textbooks and localities have added contextually and thereby quality of the programme.

Training Package on Awareness on Safe Traffic: The material was prepared like additional textual material, for Classes VI to X. The style of writing of the modules was of traditional method. Lecturing/explaining type of methodologies has been followed. There is no provision of evaluation procedure at the end of the module but in some modules oral, diary, individual, group work procedures have been suggested. This training package has followed constructivist approach to teaching learning as per the recommendations of NCF-2005. There is no scope for split-up model and scope for discussing the difficulties after working in schools. It does not contain the process of identification of training needs of the teacher by any agency. The teachers' guide training package was developed in 2009-10. The materials are not

formulated in the form of training modules. It is written as additional support textual material for teachers of classes VI to IX students. But illustrations given in the package are explanatory and can be used in the subsequent years.

Training Package on Art of Preparing Evaluation Papers in Mathematics: The training package has not followed constructivist approach to teaching learning as per the recommendations of NCF-2005. All the modules are mostly prospective and hence creative activities are not possible. It can develop knowledge, understanding and application ability in the teachers by self-learning. However, it cannot be considered as training packages for the teachers.. There is no scope for split-up model and scope for discussing the difficulties after working in schools. The material does not contain the process of identification of training needs of the teacher by any agency. It is a material used in the training of teachers. It does not indicate whether this material is need-based or not? If it is need based what is the mode of assessment of training needs? Further any material should not be accepted as training package/module if it is not prepared in modular form following specific format. Objectives of the package should be formulated clearly, based on training needs and accordingly training modules should be developed with module transactional methodologies, evaluation procedure, etc. In view of above, it is suggested that specific modules should be developed on any area as per the needs of teachers following specific formats which can be transacted within the schedule period of the training. In addition to day-to-day evaluation of teachers pre-test and post test should be conducted before and at the end of the training in order to know the effect of training over teachers.

Training Package on Project-Based Activities in Science (Physical Science and Life

Science): The training package has not followed constructivist approach to teaching learning as per the recommendations of NCF-2005. Since projects are wholehearted purposeful creative activity, there is scope for creating a variety of experiences in the students. The package is exclusively prepared for the students and not for the teachers. However, it cannot be considered as training package for the teachers. There is no scope for split-up model and scope for discussing the difficulties after working in schools. It does not contain the process of identification of training needs of the teacher by any agency.

These are not training packages for the teachers. The packages should contain all the aspects and follow the format as recommended by SSA; these booklets should contain a few exemplars and model question-answer for the secondary classes which may help the teacher to prepare better questions and follow appropriate evaluation procedures. There is no mention of objectives of training, transaction methodology, and evaluation procedure for the teachers. These do not contain remedial activities for children with learning difficulties. There should be a list of suggested readings at the end of each module. Follow up activities are to be mentioned to enforce learning.

Training Package on Skills of Preparing Competency Based Evaluation questions in Geography:

The training package has not followed constructivist approach to teaching learning as per the recommendations of NCF-2005. The package is exclusively prepared for teachers which can develop knowledge, understanding and application ability in them by self-learning. However, it cannot be considered as training package for the teachers. There is no scope for split-up model and scope for discussing the difficulties after working in schools. It does not contain the process of identification of training needs of the teachers by any agency. It is

a not a training package for the teachers. The package should contain all the aspects and follow the format as recommended by SSA/MHRD. Evaluatory questions on Geography, are specific, competency based to access the ability of a learner. There is no mention of formal training duration, transaction methodology, and evaluation procedure for the teachers. These do not contain remedial activities for children with learning difficulties. There should be a list of suggested readings at the end of each module. Follow up activities are to be mentioned to enforce learning.

Training Package on Skills of Preparing Competency Based Evaluatory questions in Bengali (1st language):

The training package has not followed constructivist approach to teaching learning as per the recommendations of NCF-2005. The package is exclusively prepared for teachers which can develop knowledge, understanding and application ability in them by self-learning. However, these cannot be considered as training packages for the teachers. There is no scope for split-up model and scope for discussing the difficulties after working in schools. These guidelines stress on identification of training needs of the teacher. There is no suggested reading list and other educational audio-video programme for teachers. The training material on Bengali as first language is well developed taking care of the essential elements of learning Bengali grammar and placement of unit wise topics for Classes VI-X. The rating of Experts on training package at upper primary stage is given in Table 3.46.

Overall, the positive aspects identified with reference to the materials evaluated can be summarised as:

The state SSA mission has used a good number of training materials, including those developed specifically for the purpose of training by the experts through workshops; and those in collaboration with reputed national and

international organisations. Appropriate structures have been created at the state, district and sub-district levels for the design, development and conduct of in-service training programme. Adequate number of resource persons and personnel to manage in-service programmes were reported to be engaged at different training centres. Most of the training materials were written in regional language, i.e. Bengali, in simple language understandable to the trainees. There has been a balance between content and pedagogy aspects of in-service training programme. More emphasis has been laid on content areas at the primary level and pedagogy aspect at the upper primary level. A good number of training material on relevant/innovative aspects of school education, e.g. NCF-2005, traffic rule, disaster management, motivation, art of framing questions, have been used as reported from time to time.

The major weaknesses, as reported by the evaluators, are summarised as: Most of the training packages/materials are available in forms other than modular Teachers' manual and monographs have been reported to being used as training materials. Use of such materials is likely to make the training programme lecture-based and thereby monotonous. The presentation of contents in many cases does not encourage constructivist approach. Lack of personal style of presentation, for example, use of personal pronouns such as we, you, is not likely to facilitate interactive participation among trainees and/or between trainees and RPs. The materials, in many cases, do not contain objectives either at the beginning of the material or at the beginning of each chapter/unit/module. None of the training materials assessed indicates split-up approach envisaged in SSA guidelines. The programmes are held in one shot at CLRC/ULRC or CRC levels. The duration of training programmes, in many cases, is inadequate. The training schedules circulated by PBSSM to the District Project

Authorities often depict transacted schedule side by side. The training materials used for in-service training have not been developed on the basis of identification of training needs through empirical survey. The decision made with regard to training inputs is arbitrary. Many training materials do not indicate transactional methodologies. In some cases suggested methodologies are seemed to be traditional, mostly confined to lecture, discussion and

question-answer. There is hardly any indication for the use of technology resources and/or field work/hands on experiences. Most of the training materials do not contain suggested reading list or educational programme to supplement knowledge and understanding of teachers on the training inputs. Training materials lack adequate evaluation exercises in the text or at the end of the unit so as to provide feedback to the trainees and keep them active during the programme.

4

Way Forward

Training package is an important component in the overall training design and inputs. The quality of training depends on this component to a large extent. The analytic view of the training packages indicates that print material dominates the total space. Occasional reference to teleconferences and other technologies find a place in the training packages in a couple of states. With the IT leadership that the country is proud of and additional resources available in school as well as teacher education, the expectations are high. In the times to come, the potentiality of IT application to INSET needs to be fully utilized. Professional development of teachers is not a one shot affair, nor a periodical intervention. It is a lifelong activity. The sooner it is recognised as a legitimate reform the better it is for realising the objective of excellence in education, in general, and teacher education, in particular. The initiative is in line with aspiration of the community at large. Needless to assert, that the reform in school and teacher education is to be holistic.

Mastery of pedagogical skill like communication skills, probing led questioning skills, cooperative and collaborative skills are as relevant as the basic education in the beginning two grades since both serve as learning tools for problem solving, exploring discovery and innovating to construct knowledge. Learning of multiple intelligences enhances the success rate.

These should form the pedagogical content of INSET leading to the sharpening of the pedagogical intelligence of teachers. The training packages have been found to wanting in this respect. Effort needs to be made to get these with the subject orientation in INSET.

Face-to-face is the dominate mode in the packages. It is costly with the opportunity cost of the teaching time of large number of teachers is lost. Variety of learning resources and variety of activity is supported by teaching and teacher effectiveness research. Training package based on eclectic mode involving face-to-face, self-learning modules, supported by practice videos, teleconferencing, internet search and research on different issues INSET needs to be developed. Evidently, teachers and resource persons will have to be equipped with technology and skills to use it for learning.

Viewing INSET as lifelong activity onsite assistance by the school head and out of the school professionals and onsite coaching through decentralised support system involving CRC, BRC and DIETs should be an integral component of INSET. The way forward will make it functional increasing teacher effectiveness with brighter future of teaching the 21st generation of learners in schools. A dream indeed with faith in the dictum that dream of today is the reality of tomorrow.

List of Experts

- | | |
|---|--|
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| 5. Professor D. K. Bhattacharjee
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Annexure-II

Schedule and Guidelines for Assessment of Training Packages (ISTT-1)

Instructions

- *The training package refers to the complete set of training materials both print and non-print for inservice training.*
- *The training packages developed and used during the years 2008-09, 2009-10 and 2010-11 will be evaluated using the schedule prepared for the purpose.*
- *This tool consists of two parts. The first part deals with information about the training package and the second part provides guidelines for the evaluation of the training package.*
- *The training package(s) shall be evaluated in a workshop mode by a group of experts. They will prepare a report after completing evaluation based on the guidelines and attach a copy of the completed schedule with the report. They will evaluate the training package(s) for primary and upper primary teachers separately unless there is a common package for both.*
- *The experts will also report the changes that have appeared in the training package(s) for primary/upper primary school teachers over a period of three years.*
- *The experts may also mention any other issues/points not covered in this schedule for evaluation of the training package(s).*
- *The appropriate code of response should be written in the box.*
- *Do not leave any blank. Write nil if information is not available.*

PART-I

Information about Training Package

1. State Code
2. The training package evaluated is meant for :
 - Primary teachers (1)
 - Upper Primary teachers (2)
 - Common for both (3)
3. Agency/Committee that prepared training package/material.

4. When was the training package prepared for 2010-11? _____
5. In the space provided below, give information about the training package(s) used during 2010-11.
 - (a) Title of the training package(s)/material(s) _____
 - (b) Language of the training package(s) _____
 - (c) No. of days suggested for transaction of the training package.

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 - (d) No. of modules in the training package(s)

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 - (e) No. of resource persons recommended for transacting the training package

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6. Give information about the training package(s) used during 2008-09, 2009-10 and the changes, if any, during 2008-09 to 2010-11, in respect of the following items:

	2008-09	2009-10	2010-11	Changes
Title of the Training Programmed				
Objectives of the training				
Areas covered				

Title of the modules				
Transaction methodologies, including suggestions, if any				
Time required/ recommended for transaction, if any				
Evaluation procedure given in the package, including suggestions, if any				

PART-II

Evaluation of the Training Package

7. Comment on the quality and coverage of the training package(s) in the light of the SSA guidelines 2008:

- (a) It takes into account the constructivist approach as advocated in NCF-2005. This means that the teachers should act as 'facilitator' and should work towards creating a variety of learning experiences in and out of the classroom that enable children to construct knowledge from activities and experiences in day to day life. The teacher is not to be a 'transmitter' of knowledge to passive recipients (the children).

- (b) This approach requires being reflective, that is they need to become mindful enquirers into their own experiences, to guide children meaningfully.

- (c) The guidelines advocate a 'split up' model of in service training, in which 6-8 days training is provided at the BRC/DIET level and 2 days training through actual observation of the classroom situations. Thereafter, teachers are expected to return to their school settings for 2-3 months, to try out the recommended methodologies and ideas. At the end of the training programme, they once again return to the BRC/DIET for 2 days to share their experiences and reflect on the new ideas before they complete the training.

8. Give your rating of the Content of Training Package(s) for the years 2008-09, 2009-10 and 2010-11.

(Write 3 for 'to a large extent', 2 for 'to some extent', 1 'for very little or not at all').

S.No	Whether the content of training package:	2008-09	2009-10	2010-11
(a)	is in line with the objectives of training			
(b)	is free from prejudices on the basis of caste and gender, etc.			
(c)	deals with the concepts adequately			
(d)	contains appropriate illustrations			
(e)	uses simple and easy to understand language			
(f)	promotes activity- based teaching			
(g)	has potential to arouse and sustain interest of the trainees			
(h)	suggests appropriate transaction methodology			
(i)	contains sectional review in each module			
(j)	contains remedial activities for children with learning difficulties			
(k)	provides a list of suggested readings at the end of each module			
(l)	includes suggestions for follow-up activities to reinforce learning			

9. Point out in the training package (s) those elements which:

- (a) are easy to translate into classroom practice _____
- (b) are difficult to translate into classroom practice _____

10. Give points of strengths and weaknesses of the training package of 2010-11 in each of the following aspects.

S. No.	Aspects	Strengths	Weaknesses
(a)	Training objectives		
(b)	Language of the training package		
(c)	Presentation of the training package		
(d)	Practicability and implementability within the given time		
(e)	Content of training package		
(f)	Transaction Methodology suggested in the package(s)		
(g)	Methods suggested for evaluation of training programmes.		
(h)	Follow up of the training programmes.		
(i)	Any other (Specify)		

(Signature of Experts)

(Signature of State Coordinator)