

Quality Improvement in Primary Education(M.P.)



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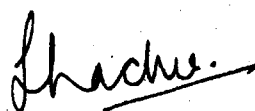
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PREFACE

In the last few years the Madhya Pradesh SCERT has done a great deal of work in the field of primary education. Primary education must be compulsory for every child between the age of 6-14 and it becomes our aim to ensure that the child goes to school because the school environment is friendly and attractive, the books are colourful, interesting and at the level of the child's understanding and the whole idea of education is not intimidating to the child. To achieve this SCERT has experimented with a number of very novel and exciting ideas. I am happy to share with SCERT the credit due to them for coming out with an excellent curriculum, out-standing books and a very innovative and effective training course for teachers.

The entire gamut of activities, the self evaluation and consequent changes done in the academic areas has been stated in the following pages. I want to take the opportunity to congratulate all the officers and staff of SCERT Madhya Pradesh for four years of consistent hard work and commitment to the smiling and willing child who goes happily to school and who, at the end of the day, feels he has not only learned something but that he has learned something useful and learned through activities that he himself participated in. Our motto is

'An educated child is our greatest treasure'.



LOVELEEN KACKER
Director SCERT
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Improving Primary School Education in MADHYA PRADESH

The package of academic improvement of Primary School in Madhya Pradesh has been given the name of **Seekhna- Sikhana Package**. This package is really a new pedagogy, a new method which is consistent and comprehensive. It contains a whole new curriculum, text books, teacher training, changing evaluation techniques and a new system of monitoring and feedback. The package includes Teaching- Learning material, teacher training methodology, non- invasive student evaluation methods and a facilitating administrative and management structure, all within the state education department.

All the efforts to improve quality of Primary School Education are based on the following general principles.

Children should acquire competencies as per MLL'S as against rote learning of specific.

Teaching learning process in Primary Schools should be child centred and activity based.

All academic inputs at the Primary School level should not be seen in isolation but as part of a larger pedagogic intervention.

CURRICULUM COMPETENCIES AND TEXT BOOKS

These principles which became the foundation stone of the Primary School curriculum and text books were arrived at through a complete process involving a number of people in the educational sector. From MLL'S competencies were identified in many workshops. The process began with a National level workshop in 1993 organised by Madhya Pradesh at Bhopal to review the existing curriculum. Experts from national level research institutions, international agencies, voluntary agencies, lecturers from District Institute of Education and Training, primary school teachers and state government officials participated in this workshop. The objectives of the workshop were:

- (a) Evaluation of existing curriculum on the basis of available studies and in the light of revised NPE 1992 as well as the MLL'S laid down at the National level.

- (b) Delineation of priority areas for the new curriculum and texts and development of an outline for a new curriculum.

Consequently, a steering committee was constituted to guide SCERT in delineating a new curriculum for grades one to five. Several workshops were organised with primary school teachers and experts. An advertisement was issued to invite suggestions from all people. Through these processes SCERT Madhya Pradesh devised a curriculum for primary schools based on competencies devised from the minimum levels of learning in 1994.

To begin with, the state set up a body called the Technical Resource Support Group (TRSG) comprising of experts from all over the country. The TRSG became a major advisory body for guiding the process of academic reform in primary school education. A major decision that the TRSG took was that text books should be finalized only after testing in the field with the active participation of the teachers of experimental schools, utilising at least one year for the final development of material for each class.

After deliberations in the TRSG, agencies were invited to conduct field trials of text books. To begin with, only two agencies came forward. SCERT was one, and Eklavya, a voluntary organisation that had been working in the state for more than twenty years, was another.

In 1994-95, SCERT fielded its textbooks for grade one in 156 primary schools of five districts and Eklavya in 125 schools of Shahpur block of Betul district. After these field trials both agencies decided to join forces and come out with an amalgamated set of text books for grade one, which contained the best that both agencies had to offer. The first grade texts were notified in May 1996 to be taught in the academic year 1996-97.

In 1996-97 another agency, Shikshak Samakhya, a UNICEF sponsored project agency, also decided to conduct field trials of their book, Shikshak Poethi, a teacher manual which contains a number of activities for the teacher.

In 1996-97 all three agencies participated in making the grade two and three texts. Typically, texts were written in workshops in which primary school teachers, members of voluntary agencies and DIET faculty interacted with SCERT to come up with a final product after a great deal of debate and discussion.

In 1997-98 new text books of grade one, two and three were introduced in

all the 45 districts of the state and class four books were field tested in the same 156 schools. In 1998-99 new texts for grades one, two, three and four have been prescribed all over the state.

Each of these texts are complemented by a teacher annotated book which contains a page for the teachers which helps them in classroom transaction. On the teachers' page several suggestions are given for the activities that can be taken up in the class so that the child understands the lesson and acquires the desired competency.

The Process of field trial :

The field testing of instructional material is a unique and rewarding experience. Field trials simply mean that texts prepared are made available in a small number of schools which constitute the sample. Extensive feed back is then taken by :

1. Asking teachers of the selected schools to make notes on specific lessons.
2. Observing the teaching-learning process in the classroom.
3. Conducting achievement tests.

The teaching-learning material is improved upon and finalized on the basis of this feedback. This feedback is invaluable in ensuing a pedagogy that is contextually relevant and actually works.

Last three years' trials brought out the following issues -

1. Just text books and teachers guides are not enough for improvement in quality of education. Additional material for classroom activities such as library books, card sets, pocket board etc. are also needed.
2. Teacher training for field trials needs to be specific, content based, comprehensive and intensive for better transaction of the instructional material.
3. Field trials have to be planned carefully. Otherwise they can:
 - Generate useless data.
 - Not indicative of the reasons for poor performance and what inputs are needed.

Based on these experiences SCERT has improved upon the trial design every year. This year 100 more schools in another 5 districts have been identified for field trials. This means now field trial is done in 256 schools.

Madhya Pradesh has put its best foot forward for pedagogic reform in elementary school education. A competency - based curriculum, carefully made books and comprehensive teacher training form this new **“Seekhna - Sikhana Package”**

The Madhya Pradesh experience clearly suggests that despite many problems and pitfalls, community, NGO and government partnerships are feasible and perhaps the way to achieve Universalization of Primary Education with quality improvements.

The new books in the Seekhna-Sikhana Package have been developed with great care. For instance, for grade one, two texts have been prescribed. One is a book named **“Dham-Dhama-Dhum”**. This book contains simple, enjoyable, poems and picture-stories. **“Dham-Dhama-Dhum”** is for the child who comes to school for the first time and is used by the teacher for the first three months of the year, to make the child familiar with the so-called hostile school environment. This three month period has been named the **“School Friendliness Period.”** The idea is to make the first three months in the school specially joyful and child friendly for children to set the stage for future learning. The other book **“Bharti”** introduces formal learning but in a playful, interesting manner. Similarly, the second, third and fourth grade books have been prepared carefully to stimulate children and make school a happy, joyful affair.

All the new books have been made to foster competencies as against rote learning. The same concept is put to the child in many ways, so that child gets to understand the concept and imbibe it completely. The books have been carefully prepared and include exercises to stimulate children’s interest and imagination, and also to provide them plenty of opportunity to practice their skills.

A very important approach in these books is that they are based on the way children actually learn. In practice children imbibe concepts, information and skills related to language, mathematics and environment in an integrated way. In these books principle of integration has been considered so that a single lesson can be used to teach different kinds of competencies of different subjects.

The language in all these books is simple. Care has been taken to introduce concepts through contexts that are familiar to the child. Rural life has been por-

trayed in most of the material. Care has been taken not to portray poor people or people of some communities or gender issues in a negative light. The attempt is to integrate members of all communities as valued members of society. Special care has also be given to gender issues. Mathematics has been approached lesson after lesson through a play-way method. An attempt has been made to suggest games which children can play often and get practice in mathematical concepts. Maximum practice has been suggested of concepts children find difficult.

The basic approach continues to be activity, discovery and environment based, along-with many child development criteria.

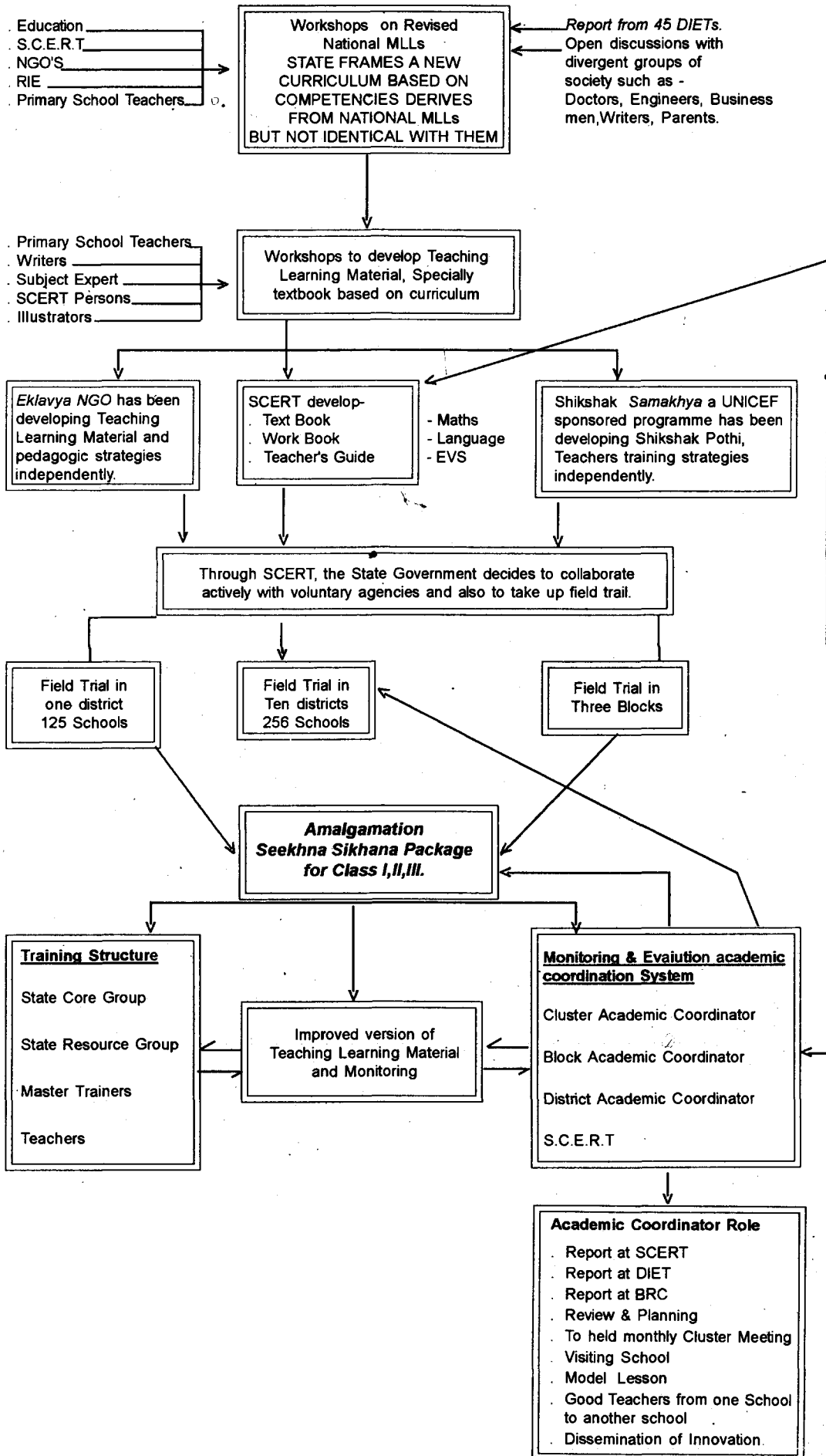
Critical evaluation of curriculum and instructional material

In the year 1997-98 when curriculum was once again reviewed it was found that most of the difficult competencies got accumulated for class V. In an attempt to make the syllabus of class I - IV within the abilities of the children, unfortunately the syllabus get diluted and a number of competencies that should have been included in class I - IV get left out. It was then felt that the syllabus for class V was becoming very heavy for the child, therefore excess area (which has been left out of earlier classes) was shifted back to the lower classes according to child's class level. On the basis of this curriculum books were changed and thus the books for class I - IV, which were finalized in 1997-98, were a perfect blend of content and activity based learning that was in accordance with the child's abilities. Some of the changes made in books were as given below:

1. The teacher's reference activity book '**Kopal**' was reviewed and found to be exceedingly popular and useful. However some more poems and stories were added for variety.
2. The feed back from teachers, educationalists revealed that the concepts that needed to be learned in classes I - IV were not upto adequate level in the text books, and the books needed standardization. Besides, the changes in the curriculum meant that essential changes had to be made in the books too. Thus appropriate steps were taken to revise these books and upgrade the content in the texts books wherever needed.
3. In Mathematics the opportunity for adequate practice of problems was found to be lacking. Thus some more exercises were added wherever necessary, and text reduced where not required.

Therefore SCERT from time to time is involved in self analysis and correction whenever necessary. SCERT is of the opinion that text book writing is a continuous process of

PROCESS OF TEXT BOOK DEVELOPMENT IN M.P.



improvement of course. By change we mean modifications where necessary and not major changes in the pedagogy of the books.

In the year 1998 - 99 SCERT develops the following books for class I - IV

For Students	For Teachers
1. Dham-Dhama-Dham	_____
2. _____	Kopal
3. Bharti Class I	Shikshak Bharti Class I
4. Bharti Class II (Part 1&2)	Shikshak Bharti Class II (Part 1&2)
5. Bharti Class III (Part 1&2)	Shikshak Bharti Class III (Part 1&2)
6. Bharti Class IV (Part 1&2)	Shikshak Bharti Class IV (Part 1&2)
7. Maths Class IV (For Children) Part 1&2	Maths Class IV (For Teachers) Part 1&2

TEACHER TRAINING INNOVATIONS IN MADHYA PRADESH DURING 1994 -1998

Teacher training in Madhya Pradesh under DPEP has evolved in phases. In the year 1995-96 about 46778 teachers were trained in an approach based training. About the same number were trained again in content / competency the next year. In the first year training was not content based because the new books were yet to come out and further, we needed to prepare the primary school teachers in the new pedagogy which was dramatically different from the traditional, straight - laced approach. Teachers needed to understand the philosophy behind the new pedagogy which was child - oriented, activity based and skill-oriented. In the second year since books of class I and III were available teachers were trained in content and pedagogy both.

In the third year, all these books (class I - III) were introduced in the whole state and 1.25 lakh teachers were trained again in content and pedagogy both. Since training of such a huge number of teachers was not possible on a one is to one basis, four-level model of training was adopted. At the SCERT, a state core group of trainers was identified and trained. This group in turn trained the district resource group, which trained the master trainers and finally the master trainers trained the teachers .

The experience of three years training brought to the forefront a number of difficulties.

The 4- level training led to great transmission loss and consequent dilution of training.

The involvement of DIETs was not as vigorous as desired .

Training took a great deal of time .

Training concentrated on content and pedagogy over-looking local problems that needed to be addressed if training was to be effective.

Training in 1998-99

From the above experience SCERT, which trained about two lakh primary school teachers in 98-99 (including Gurujis and Shiksha Karmis) certain changes were made and these primarily were :

1. **Three level Training**
The 4-level training was reduced to 3-level training. This reduced transmission loss.
2. **District Training Plans**
District training plans were developed at the district level by the DIETs itself. This ensured greater involvement and capacity building of DIET personnel. Also the plans were naturally tailored to meet local needs.
3. **Multigrade Teaching**
Since most schools are in a Multigrade situation (and will continue to remain so) therefore teachers must be equipped to deal with such a situation. The training incorporated a number of skills and activities which would help the teacher handle a school where he/she was sole teacher in a class ranging from 6-14 years.
4. **Evaluation**
An evaluation strategy had to be evolved because in Madhya Pradesh there are no examinations up till class III. Aaklan, the name of this strategy, created tools with which the teacher could assess the learner achievement of the children taught. Training had to necessarily include this.
5. **Community participation**
The major problems still being faced are high drop-out ratio and non-attendance of school by many children, mainly girls. To improve the situation the teacher was given the skill of mobilizing community support to ensure children come to school as well as to stimulate interest in the academic activities of their own children. This led to better participation of village education committees and improvement of school environment through the contribution of guardians.

6. Academic Co - ordination

The scheme of academic co-ordination (begun the previous year) was carried forward and DIET members were made Block Academic Co-ordinator. All cluster academic co-ordinators were selected from the master trainers. This greatly helped the work of academic co-ordination.

7. Education for disabled children

8. Education for gender equity

9. Education for value clarification

10. Minimum levels of Learning (MLL)

Need of MLL

Competencies related to MLL

Meaning of Mastery level of MLL

Teaching learning process for MLL

11. Continuous and comprehensive Evaluation (CCE)

Meaning of CCE

Techniques for making evaluation competency based

Diagnosis and remediation for learner achievement

12. Developing school friendliness climate

Significance of school friendliness

Components of school friendliness

Kind of environment and play activities

Child's social and academic readiness/preparedness

13. Child Central approach

Role relationship between teachers and learners

Participative and group learning

Learning centred around the child's world

14. Teaching of language

Developing listening and speaking skills

Techniques for development of reading skills

- # Strategies for writing skills
- # Activities for development of fantasy
- # Exemplar activities for competency based evaluation in language learning

15. Teaching of Environmental Studies

- # Observation and measurement of immediate environment
- # Scientific method interpretations
- # Techniques for making excursions educative
- # Understanding immediate environment
- # Activities for creativity
- # Exemplar activities for competency based evaluation in environmental studies.

16. Teaching of mathematics

- # Activities for numbers
- # Place value of numbers
- # Simple fractions
- # Decimal fractions
- # Time, mass, capacity, area, measurement
- # Understanding geometrical figures and measurement of angles
- # Model exercises for evaluating mathematical concepts

17. Art, Health and Physical Education

- # Activities for Art, Health and Physical Education.
- # Teaching-learning strategies

The achievement in training of teachers, Shiksha Karmis and Gurujis are as

follows :

1995-96	46,500 teachers of 19 districts. 10 days training in a face to face mode.
1996-97	31,000 teachers of 16 districts. 10 days training in a face to face mode.
	13,700 teachers of 09 districts. 10 days training in a face to face mode.
1997-98	1.12 lakhs teachers of 45 districts. 12 days training in a face to face mode. Out of which 3 days training was through teleconferencing distance mode.

1998-99 1,27,609 teachers trained in 45 districts for 12 days through face to face mode.

Training in 1999-2000

After 4 years of training it is time to have a new and critical look at the training being conducted and also to come out with fresh ideas and approaches. After a number of brain steaming sessions SCERT has come up with the following new ideas for 1999 - 2000.

1. Professional Courses

A teacher who has received training 2 - 4 times in content and pedagogy, finds the training repetitive and is not gaining anything new. Therefore it was decided to introduce short - term professional courses which deal with one subject at a time, and thoroughly improve the teacher in that area. These courses will be of 5 days and approximately 50 teachers will be trained at one time. These teachers will be selected according to their need which will be assessed by the academic co-ordinators. Areas identified for such intensive trainings are:

1. Content Based teaching of Environmental Education
2. Content Based teaching of Language (Hindi)
3. Content Based teaching of Mathematics
4. Child Psychology : How to deal with child
5. Multigrade teaching
6. Education of disabled
7. Use of KOPAL and DHAM- DHAMA- DHAM for school friendliness
8. Aaklan
9. Community Participation : Need & Ways
10. Academic Co-ordination

2. Certificate Course for Shiksha Karmis and Gurujis

In Madhya Pradesh to meet the tremendous shortfall of teachers in the primary school, the state government recruited, through the Panchayats, approximately 70,000

shiksha karmis and 30,000 gurujs. These teachers are totally without experience and have no knowledge of the pedagogical reforms of the state. Besides, many also do not have degrees in education which are essential for a teacher. To meet this problem and to professionally equip these teachers SCERT has decided to run a one year certificate course which will be a correspondence-cum-contact programme which use the distance mode of learning too in parts. Broadly we have structured our programme in the following way:

- # 35 days of contact programme in summer vacation
- #Correspondance course along with assignments
- #5 days contact programme
- #Second correspondance course with assignments
- #Followed by 5 days of final contact and assessment programme

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