End-term Survey Report

Mathura Pilot Project

2012-2013

EARLY LITERACY PROGRAMME

Department of Elementary Education

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एन सी ई आर टी
NCERT

National Council of Educational Research & Training

Preface

Researches in the area of reading and writing over the past sixty years have clearly shown that reading is a constructive process. Learning to read and write is not just a matter of distinguishing letter shapes and being able to draw or copy those shapes. An understanding on how children develop as literacy learners is needed in order to provide appropriate support to enhance this development.

Reading has always been recognized as a key component of a sound educational programme, no viable plan is in place in the school system to ensure children's acquisition of, and mastery over reading skills.

In the year 2007, NCERT launched its pilot project in Mathura district of Uttar Pradesh. The project covered five hundred and sixty one schools spread in five blocks of Mathura. It served as a testing ground for the newly conceived and follow-up activities of the programme. A Base-line Survey was conducted to understand the prevailing status of reading in schools and assess the literacy environment at school and at home. Various interventions were made to support the teachers, teaching grades I and II and bring about changes in the pedagogic practices and literacy environment in school. Monitoring had been followed as an on-going process of the programme. The monitoring helped NCERT team to stay connected with the teachers, cluster and block level officials at Mathura. Monitoring helped to map out the qualitative progress of the program and understand the on ground realities of the field. Regular feedback from the monitoring provided broader understanding of the challenges occurring in the implementation and to plan further actions.

In order to assess the improvement in literacy skills among children, an End-term Survey was conducted in October, 2012. The tools had been developed keeping in view the framework of the Early Literacy Programme and the revised strategies to be used by children for reading and their comprehension ability. The tool was divided into three parts: writing, reading comprehension and literacy environment of children. The analysis of the data was done both qualitatively and quantitatively to assess the improvement among children.

We hope that this study will help understand the processes of reading and writing in classes I and II and to improve the pedagogical practices desired for early literacy.

Continuous interactions with States/Union Territories would, in future as well, create awareness about recent trends in the area of Early Literacy. This will benefit our young learners in early grades at one end and improvement in teaching learning process and learning levels at the other end.

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List of Acronyms

ABRC   Assistant Block Resource Coordinator

BRC   Block Resource Coordinators

BRT   Block Review Team

DIET   District Institute of Education and Training

ELP   Early Literacy Programme

MHRD   Ministry of Human Resource and Development

NCERT   National Council of Educational Research and Training

NCF   National Curriculum Framework

NPRC   Nyaya Panchayat Resource Coordinators

NUEPA   National University of Educational Planning and Administration

PTR   Pupil Teacher Ratio

RDC   Reading Development Cell

RTE   Right To Education

SCERT   State Council of Educational Research and Training

SSA   Sarva Shiksha Abhiyan

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

The Early Literacy Programme of the NCERT lays thrust on understanding the processes of reading and writing in the early years of schooling, moving away from the mechanical engagement with literacy. Looking at reading and writing as constructive processes, the programme focuses on drawing the attention of educationists and policy makers across the country to address literacy as an area of special concern. It aims to share the theoretical understanding and pedagogical implications and provide appropriate support to states and union territories to address early literacy as an area of special focus .

NCERT had set up a Reading Development Cell in the year 2007 under Sarva Shiksha Abhiyan with support of the Ministry of Human Resource Development. The creation of this Cell marked the beginning of a significant attempt to focus the attention of policy makers and curriculum designers all over the country on the pedagogy of reading in the early classes. The Reading Development Cell was designated as the Department of Early Literacy and School Libraries in February, 2010 but was later merged with the Department of Elementary Education as the Early Literacy Programme.

Objectives of the programme

The Early Literacy Programme has been pursuing the fulfillment of several objectives since its inception:

- *To address early literacy as an area of special focus with an understanding of its pedagogical & theoretical implications.*
- *To initiate dialogue and attention on the pedagogy of reading and writing in early years.*
- *To create a cadre of teachers well acquainted with pedagogy of reading & writing.*
- *To associate reading with the experience of joy and pleasure.*
- *To enable children to become motivated readers and writers with sustainable and lasting reading skills as they graduate out of primary schools.*

To achieve these objectives, the Early Literacy Programme, NCERT had undertaken the implementation of a pilot project and a number of activities like developing a body of literature on early literacy, developing an understanding of pedagogy of reading and writing amongst teachers and officials, sensitize and create awareness about the need for early literacy among educationists, policy makers and planners.

The Early Literacy Programme has attempted to break the narrow notion that learning to read and write is dependent only upon textbooks. The programme emphasizes on using children's literature in the classroom to provide children with an environment conducive to reading. Reading and writing are understood as developmental processes and an early literacy classroom is an unhurried, relaxed space for teachers and students to enjoy the processes of reading and

writing. Children in an early literacy classroom should have easy access to children's literature with the freedom to browse through them with pleasure. The books are free from the burdens of textbook learning and provide opportunities for children to share the pleasure of reading with their teacher and the peer group. Children's literature provides opportunities and freedom to engage with books and develop familiarity with them.

The Mathura pilot project on early literacy has been implemented in five hundred and sixty one schools in five blocks (Goverdhan, Chaumuha, Naujheel, Raya and Farah) of Mathura districts since 2008. The pilot project focused on building capacity of teachers of grades I and II in order to change the pedagogic practices and literacy environment in school so that children in these grades learn to read for meaning and write with purpose.

Interventions of the Mathura Pilot Project

*The interventions undertaken under the project involved **providing material for children and teachers, extension programmes, orientations of teachers** and **monitoring.** Material was provided in project schools in the form of select children's literature, graded reading series Barkha, children's magazine Firkee bachchon ki and designing and creating reading corners. Manuals, books, video programmes and posters were prepared for teachers which were used in the orientation programmes. Extension programmes like a Pustak mela was organized for awareness generation among community members. A programme to establish functional school libraries was also undertaken in select project schools and a national seminar on early literacy was also organized.*

Since the pilot project was implemented with the objective of understanding the impact of the pedagogical approach, classroom implications and utilisation of available resources, it was necessary to assess the change that had taken place in the school environment, teaching practices adopted by teachers; and the physical environment of the classroom and its impact on student learning. An End-term Survey was conducted in October 2012. Forty schools from all the five blocks were selected for the study.

*The end-term study was planned based on the following **objectives**:*

- *To assess the prevailing status of reading in schools post the interventions.*
- *To assess the effectiveness of pedagogic practices adopted in schools.*
- *To assess the literacy environment at school and at home.*

Methodology

Sample - *While planning the end-term survey it was decided to cover all the blocks and select a representative school from each of the forty seven clusters. This selection of school was done on*

a random basis. At the time of study of the total sample thirty eight schools could be covered in the study.

Similar to the base-line survey conducted in the year 2008, students of grade III were assessed for their reading and writing abilities in the end-term survey as well. All students of grade III present at school on the day of data collection were covered. The total numbers of three hundred and thirty three students were covered in the study.

The design of the tool - *The tool has been developed keeping in mind the theoretical framework of the early literacy programme. The tool was developed to capture the changes in the strategies used by children for reading and their comprehension ability. The tool was divided into three parts: writing, reading comprehension and literacy environment of children. For the tools used in the end-term survey, refer to Annexure- A*

Data Collection Procedure - *The end-term survey was led by the Early Literacy Team at NCERT. The study was done over a period of five days in October 2012. The data collection was done in two phases. In the first phase three Blocks were covered and in the second phase two Blocks were covered. All students of class III present that day were interviewed on a one on one basis.*

Data Analysis

The data collected from children who participated in the study includes both quantitative information as well as qualitative observations of the filed investigators. The quantitative data has been analyzed by using simple percentages while largely the analysis is qualitative. A comparison has been provided between the base-line and the end-term survey on different aspects related to children's reading and writing behavior.

The qualitative analysis of data has captured the different strategies for reading adopted by children. This qualitative analysis is further enhanced by providing profile studies of children. These profiles are representative of children who participated in the study. The analysis goes on to describe the different reading and writing behaviours demonstrated by children which is reflective of the classroom teaching practices adopted by teachers. It also shares the learning environment available for children. This is based on the responses of children to questions on exposure to print and story- telling at school and home.

Key Findings and Recommendations

Key Findings

The End-term survey of the Mathura Pilot Project has revealed various aspects about the process of reading and writing in the early years of schooling.

The analysis and findings highlight the following points:

- *It is important to understand the major dimensions through which children's reading and writing skills are developed rather than slotting them into categories of readers and writers or non- readers and non-writers.*

- *Each child is on the path of development and their development should be supported by informed pedagogic practices, conducive classroom environment and other factors like opportunities to engage with print and reading and writing in general. These aspects need to be addressed during teaching learning process.*

- *Children's exposure to a print- rich environment is imperative in enhancing their reading skills. Children should be given ample opportunities to engage with print material. This understanding among practitioners needs to be developed.*

- *Children essentially look for meaning when they read. Use of cues from context, pictures, background knowledge reveals how children use these cues to make meaning. These are the parts and process of learning reading. It indicates that children expect print material to be meaningful and purposeful and employ reading strategies for the same.*

- *Prediction is a developmental phase of the reading process and its acknowledgement in the classroom supports children's reading process and leads to successful comprehension of the texts.*

- *Children's rich exposure to literature increases their repertoire of employing strategies to read a text and an attempt to pick up an unfamiliar text with confidence.*

- *Children's self-correction in their reading is indicative of their meaning construction. It is a way of monitoring their reading and it is a Meta- cognitive act.*

- *Children's writing is a reflection of their engagement with print. Children were not only aware of the print in their environment but also intelligently use it in their writing.*

- *Children's risk-taking behaviours in reading and writing convey their positive and confident attitudes towards literacy.*

- *Changes in children's reading and writing behaviours determine the pedagogical changes in the classroom. It is indicative of the changes that have emerged in teachers' understanding of early literacy which has reflected in the classroom instruction and eventually in children's reading and writing behaviours.*

Teachers were not interacted with as a part of this survey. But time to time discussion, monitoring reports and focus group discussion revealed a progressive leap in their understanding. Some important aspects observed in teachers understanding are:

- *Teachers understood that 'Reading' is not decoding but reading is 'reading with comprehension'. Teachers now view listening, speaking, reading and writing as integrated processes. They are now viewing writing as a meaningful and purposeful activity rather than a mechanical process.*

- *Teachers have become aware of the importance of children's literature as a meaningful and effective resource of learning to read. Teachers now acknowledge the developmental phases of reading and writing as they emerge in the classroom and joyfully accept children using their home language in school. Classrooms have become lively with the presence of books and children's literature.*

- *Classroom activities of reading and writing connect with personal experiences of the children. The teachers now readily reach out to students and qualitative talks have become a regular feature between them.*

Recommendations

- *A National Resource Group on early literacy needs to be formed that creates a platform for discussions and debates on existing practices and reforms in the area. This group should comprise of educationists, early literacy experts and planners and will be responsible for providing support to states in designing their language programmes.*

- *States/UTs need to form its own resource group on early literacy. This group should comprise of academic authority of the state, educationists, early literacy experts, children's literature experts, teachers and teacher educators who can guide and support the state in its language programmes in aspects curriculum development, material development for teachers and children and capacity building of teachers.*

- *The pedagogical practices should focus on reading for comprehension and writing with meaning and should be supported by meaningful print rich environment in schools. The importance of literacy learning in the foundations years of schooling needs to be taken with seriousness as it impacts learning and all other curricular areas.*

- *The academic authorities of States/UTs should ensure that the early grades language programmes should be carefully designed and its linkage to progressing grades should also be well defined.*

- *The onus of the literacy programme should be shared with the people involved at State, District and Block and cluster levels to ensure support and long term sustainability. Professional development of teachers, head teachers, Cluster and Block Resource teams is imperative to develop a sound understanding about the theoretical concepts of early literacy.*

- *It is desirable that States/UTs ensure that at the school, teachers are available as per the Pupil Teacher Ratio (PTR) prescribed by RTE-2009. The school should assign teacher(s) for grades I and II specifically.*

- *Every States/UT should plan professional development of practitioners on a long-term basis. To ensure that children would become independent readers and writers, teachers need to be empowered with sound theoretical understanding of concepts and processes of learning to read and write. Professional development programmes apart from training could also include monthly review meetings, teacher seminars, visit to model schools and others.*

- *Pre-service teacher training programmes should include core area on early literacy and children's literature in their curriculum. All subject teachers should graduate with an understanding of literacy development of children to understand and support literacy learning processes of children, which every teacher encounters, irrespective of the subject they teach.*

- *In-service teacher training programmes should focus on all components of early literacy to develop conceptual understanding of the processes of reading and writing amongst primary school teachers. The trainings should be spread over a considerable time-frame to allow teachers to delve into the intricacies of the processes involved. Since there teachers have their own experiences from their classrooms, this should be used in the training to understand the process of literacy development.*

- *Material developed for student-teachers or teachers, should address the curricular needs of an early literacy programme. Teachers graduating out of professional development programmes should be empowered and equipped to address the literacy related needs of children coming to their schools.*

- *States should ensure that school environments are conducive to literacy learning. Reading corners should be created in all classrooms of children in grades classes I and II so that literature and reading material is easily accessible for children. School libraries should be functional. The school library should be a hub of all academic activities in school and resource centre for children and teachers both. The librarians/ in-charge should also be actively involved in academic activities of the school and teachers. They should all work in close cooperation to be able to gude and support each other.*

- *Children's literature is an essential component of reading corners and libraries in schools. States/UTs and union territories should ensure that relevant and age-appropriate literature is available to children in schools. States should develop clear guidelines for selection of good children's literature. This should be widely disseminated among teachers.*

- *States should ensure the alignment between pedadgogical practices in the classroom, textbooks and assessment procedures. The academic authority of the States/ UTs should ensure that the textbook aligns with the designed curriculum for schools.*

- *States/UTs should plan activities to create awareness in communities/SMC on the importance of early literacy. Activities like **pustak mela**, book week, **nukkad natak**, story festivals, mobile libraries are some suggested activities to create awareness among various members of the community.*

- *Monitoring needs to be an inbuilt part of early literacy programme implementation. Monitoring demands academic support and hand-holding of teachers, therefore, the people involved in the monitoring process, i.e. the Block and Cluster Coordinators, Head Teachers should have an understanding of the vision as well as the academic principles and classroom implementations. Follow-up, academic and administrative hand-holding is imperative for the long-term sustainability of the programme and should be a continuous process.*

- *Researches in the area of early literacy should be encouraged to expand the knowledge base in the country and create platforms for curricular discussions and debates on early literacy.*

Section: 1

Early Literacy Programme

An Introduction

SECTION 1
Early Literacy Programme- An Introduction

1.1 OVERVIEW

How do children learn to read and write; how do teachers teach children to read and write meaningfully, for different purposes and expression, what is reading and writing; how does reading and writing develop, what can make children successful readers and writers? These questions constitute today's discourse on education in the early years of children's learning in our country.

The need was felt for a long time to develop a programme focusing on the processes of reading amongst school children. Though reading has always been recognized as a key component of a well conceived educational programme, no viable plan has been visible in schools to ensure children engage in meaningful processes of reading and writing. Reading is integral to academic studies, professional success and personal development, and has been recognized in pedagogic literature as a distinct developmental area in the formative years of schooling. It has been a matter of great concern for educationists as to why reading has remained passive and perfunctory in the school curriculum. Similarly, reading for pleasure has been considered more as a theoretical concept rather than as an actual educational agenda. To help children grow up as proficient readers and writers, and with that in view, it was required to design a literacy programme focusing on the early years of schooling.

Researches in the area of reading and writing over the past sixty years have clearly stated that reading is a constructive process. Learning to read and write is not just a matter of distinguishing shapes of letters and being able to recognize, pronounce, draw or copy those symbols. These skills are quite secondary when it comes to understanding the nature of reading and writing.

NCERT in the year 1964, had implemented a project on reading. The purpose of the project was to build an active nucleus of Indian educators who could spearhead a movement on reading. It sought to develop insights into the complex problem of 'teaching-reading'. As a part of the programme, a five-week orientation course was organised and a publication was brought out in the end. A children's book was also published as a part of the programme called *Rani Madan Amar* which was later used as a grade I textbook in many states.

Many nations across the globe have also made efforts in this direction. Many developed and developing countries have specially focused institutes and universities to guide their teachers and planners on early literacy (reading and writing in early grades). Contemporary research points out that learning to read and write begins very early in life, that is for almost all children in a literate society (Teale and Sulzby,1989)[1]. Children learn through active engagement, constructing their own understanding of how language works based on the experiences, conversations and print they encounter in their life (Teale & Sulzby, 1989)[2].

Research studies state that children actively attempt to understand the nature of language spoken around them, and, in trying to understand it, formulate hypotheses, search for regularities, and test their prediction.

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[1] Teale, W. H., & Sulzby, E. (1989). *Emergent literacy: New perspectives* in D. S. Strickland & L.M.Morrow (Eds.), Emerging literacy: Young children learn to read and write, Newark,DE:International Reading Association.

[2] Ibid

Instead of receiving bit by bit a language entirely fabricated for others, children reconstruct language for themselves, selectively using information provided by the environment (Ferreiro & Teberosky,1982)[3].

> Emergent literacy is the idea that children grow into reading and writing with no real beginning or ending point.
> (Teale & Sulzby, 1989) [6].

In most literate societies, children have contact with print long before they walk into a classroom at school. They have experienced various purposes of print through books, newspapers, advertisements, bills, wrappers, covers, hoardings. Smith (2004)[4] suggests that reading begins the moment young children become aware of environmental print. It can be drawn that children become aware of the print much before they go to school. Marie Clay (1991)[5] coined the term **'Emergent Literacy' where she acknowledged the literacy behaviours of children and thus, broadened the notion of literacy**. In her research, Clay has extensively described how young children interact with books while reading and writing, even though they cannot read or write in the conventional sense. She explains that **emergent literacy is a gradual process that takes place over time from birth, until a child can read and write in what we consider to be a conventional sense**. Emergent literacy is the idea that children grow into reading and writing with no real beginning or ending point, that reading and writing develop concurrently and interrelated and according to no right sequence or order (Teale & Sulzby, 1989) [6].

In our country, efforts have not been made to make use of and implement the vast body of knowledge that is available on the reading process. It has been noticed that teachers continue to teach reading in a manner which is a result of habit and a long-standing practice. Nation-wide learners achievement surveys conducted by NCERT and other agencies show that the number of children who cannot read is very high despite completing primary school. The studies are constantly drawing our attention to the grim reality of reading in early classes. The process of reading is very complex as it involves a combination of sub-skills.

The National Curriculum Framework- 2005 emphasized reading as a focus area [7] and how teachers and their pedagogical processes remain ignorant of these developments. The teachers need to be oriented to this understanding and orientation programmes need to engage the teachers with the nuances and complexities of the reading process and address the classroom practices and needs.

The pedagogical practices should be based on strong theoretical grounds. Literacy is no longer perceived as a simple cognitive skill but as a complex and active process with cognitive, social, linguistic, and psychological aspects (Teale & Sulzby, 1989) [8]. Children's concepts about literacy are moulded from the earliest experiences and interactions children have with readers and writers as well as through their own attempts to read, write, and construct meaning (Teale & Sulzby, 1989) [9].

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[3] Ferriero, E., & Teberosky, A. (1982). *Literacy before schooling*. Portsmouth, NH: Heinemann.

[4] Smith, F. (2004). *The Identification of Meaning*. Understanding Reading : A psycholinguistic analysis of reading and learning to read. (6th ed.).

[5] Clay, Marie.M(1991). *Becoming Literate, the construction of inner control*, Auckland, Heinemann.

[6] Teale, W. H., & Sulzby, E. (1989). *Emergent literacy: New perspectives* in D. S. Strickland & L.M.Morrow (Eds.), Emerging literacy: Young children learn to read and write, Newark,DE:International Reading Association.

[7] National Curriculum Framework, 2005 National Council of Education Research and Training, New Delhi

[8] Teale, W. H., & Sulzby, E. (1989). *Emergent literacy: New perspectives* in D. S. Strickland & L.M.Morrow (Eds.), Emerging literacy: Young children learn to read and write,. Newark,DE:International Reading Association.

[9] Ibid

When children enter school, they have good control over at least one spoken language, are aware of environmental print and have experimented with written forms of communication through scribbling on walls, mud, paper, books, etc. These experiences of children reflect the fact that reading and writing develop at the same time among children and are inter-related. **Children do not learn how to read first and then learn how to write. Writing is often easier for some children to begin with than reading (Clay,1991)** [10]. Children's day to day observations reveal that listening, speaking, reading and writing are not in any way linear or isolated processes. Research on literacy learning clearly shows that the processes of reading, writing, listening, viewing and thinking develop simultaneously as learners become literate (Cooper, 2000)[11]. In schools, these research findings and rich experiences of children should be built upon in the learning process.

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> (Cooper, 2000)[11].

The goal in all reading situations should be 'understanding'. It is imperative that the message that is conveyed in the printed text be understood. **Literacy is not viewed merely as decoding but rather the whole act of reading, including comprehension (Mason and Sinha,1993)[12]**. Emergent literacy perspective advocates literacy learning by interacting with meaningful texts for genuine purposes including enjoyment. This perspective focuses on all aspects of language (semantic, syntactic and grapho-phonic), and not merely on phonics (Sinha, 2000)[13].

The desire to relate and find meaning is at the heart of reading. Reading is a complex process. It is much more than precise, detailed, sequential perception and identification of letters, words, spelling patterns and large language units (Goodman, 1967)[14]. It is a holistic act with a combination of sub skills put together (Anderson, Hiebert, Scott, Wilkinson, 1985)[15]. For a child who has learnt to read letter by letter, there is no choice except to decode the text via the phonological components. It is a difficult and wasteful process which overloads the child's short term memory and the capacity to pay attention to meaning of the text.

A concentrated effort should be made to help transfer the teacher's attention from methods to broader approaches and understanding. **Reading is essentially a process of meaning making and comprehension is an integral part of reading. It is not a new or an added skill that has to be learnt for reading.**

> Reading is a complex process. It is much more than precise, detailed, sequential perception and identification of letters, words, spelling patterns and large language units.
> (Goodman, 1967)[14]

Writing is also important for young children because they are already writing before they enter the formal classroom. Although their writing may not look like words, it is a part of their literacy learning process. Children want to write from the beginning of school. Before school, young children write on walls and floors.

[10] Clay, Marie.M(1991). *Becoming Literate, the construction of inner control*. Auckland, Heinemann.

[11]Copper. J.D. (2000). *Literacy: Helping children construct meaning* (2nd ed.). Houghton Mifflin Company. Prinston, New Jersey.

[12]Mason,J., Sinha,S., (1992). *Emerging literacy in the early childhood years: Applying a Vygotskian model of learning and development.* University of Illinois at Urbana-Champaign.

[13]Sinha, S. (2000). *Acquiring Literacy in Schools*. #493. Redesigning Curricula in journal Seminar.

[14]Goodman, K. (1967). *Reading: A Psycholinguistic Guessing Game*. Journal of the Reading Specialist. May, 126-135.

[15]Anderson.R.C..Hiebert.E.H..Scott.J.A.. & Wilkinson. I.A.G. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: The National Institute of Education, U.S. Department of Education.

Children may seem like they are scribbling, but there is meaning behind it; the children need only be asked what the scribbles mean (Graves, 1983)[16]. Calkins (1994)[17] reported that ninety percent of children come to school believing they can write. It is only schools that take away this belief and pleasure from children and make writing a mechanical process of copying, making the right curves and strokes focusing on neat handwriting.

Young children learn to write when they see us writing for real purposes (Calkins, 1994) [18]. Children understand the functional meaning of writing, that it conveys meaning and is purposeful. Calkins (1994) [19] writes that it is essential that children are deeply involved in writing. She highlights

> Children may seem like they are scribbling, but there is meaning behind it; the children need only be asked what the scribbles mean. (Graves, 1983)[16]

the importance of having young children share their writings with others so that they will perceive themselves as authors.

Reading and writing are both acts of meaning making. Children use their previous experiences and other contextual cues to make meaning in reading and compose meaningful texts in their writing. **This understanding empowers teachers to cast away few dictated ways and methods and gives them opportunities to deal creatively with the specific needs of their classrooms.**

Children's literature plays a very important role in the literacy development of children. Reading to children every day is extremely important and one of the most beneficial ways in which literacy can be promoted. Children develop an understanding about the nature of written language at a very early age by listening to books read aloud. Similarly, independent reading gives children opportunities to explore books, engage with various forms of print be it illustration or text and engage with it. This is the time when children understand how to hold a book, how to turn pages, and how to read words from left to right, running their finger across the page in a left to right sweeping motion as they read. As children engage with meaningful print and are given multiple opportunities for reading and writing on a daily basis, they pass through the processes of reading and writing at their own pace before they can be called conventional readers and writers. These are the developmental phases of literacy.

As young children read, they look at illustrations, identify objects in illustrations, pretend to read (even if they are holding books upside down!), establish a connect between various illustrations, understand the sequential order, run fingers over the text, develop an understanding of the coherence between text and illustrations, identify words, use cues from illustrations, content of the story and their understanding about the structures of language to predict the text of the story to become conventional readers. All these processes or phases that children go through are valid attempts in the process of reading. At each stage here, children are engaging with the book meaningfully and not in a superficial form. Children respond to texts in various ways which include asking questions, comments, drawing, writing, re-reading, and reflecting.

Similarly, in the processes of writing, children engage in scribbling, symbolic drawings, invented spellings (writing where they spell words based on their understanding of letter- sound correspondences) moving towards conventional spellings.

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[16]Graves, D. (1983). *Writing: Teachers and children at work*. Postsmouth, New Hampshire: Heinemann Educational Books.
[17]Calkins, L. (1994). *The art of teaching writing*. Portsmouth, NH: Irwin Publishing.
[18] Ibid
[19] Ibid

Writing should be guided by a meaningful purpose. Children should be given the responsibility to choose the topics they want to write about and the books they want to read. These behaviors and knowledge are not pre-stages. Teale and Sulzby (1986) [20] wrote "it is not reasonable to point to a time in a child's life when literacy begins. Rather, we see children in the process of becoming literate, as the term emergent indicates".

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> Teale and Sulzby (1986) [20]

While children develop and use different strategies for reading a text, it is important that children develop phonological awareness. Ferreiro & Teberosky (1982) [21] do not dismiss the importance of breaking up speech into its minimal elements (phonemes). They say instead of making distinctions, we should make children conscious of a distinction they already know and make them aware of the knowledge they already possess. Children are already aware of the letter-sound correspondences as they engage in meaningful processes of reading and writing. At times, their direct attention can be brought about to the correspondences but not making the process one of mechanical drill and memorization.

Classrooms should be exciting places where children are learning literacy skills with ease and enjoyment in a meaningful context. Classrooms should be places where children have a variety of reading material, including good children's literature available for them to explore and engage with. Along with independent reading time, storytelling and read aloud sessions should be regularly conducted with children. All of these should lead to meaningful reading and writing opportunities where children behave like 'readers' and 'writers' and gradually became independent readers and writers.

1.2 Need of the Programme

The Early Literacy Programme (ELP) initiated by NCERT with the support of MHRD was conceived, based on the research findings in the area of early literacy which have been discussed in the earlier section. It lays thrust on meaningful processes of reading and writing and focuses on the pedagogical practices in the classroom. Looking at reading and writing as constructive processes, the programme focuses on drawing the attention of educationists and policy makers across the country to address early literacy as an area of special concern. ELP aims to share the theoretical understanding and pedagogical implications and provide appropriate support to enhance this development.

NCERT set up a **Reading Development Cell in the year 2007 under Sarva Shiksha Abhiyan** with the support of the Ministry of Human Resource Development. The creation of this Cell marked the beginning of a significant attempt to focus the attention of policy makers and curriculum designers all over the country on the pedagogy of reading in the early classes. The Reading Development Cell was designated as the Department of Early Literacy and School Libraries in February, 2010 but was later merged with the Department of Elementary Education as the Early Literacy Programme.

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[20]Teale, W. H., & Sulzby, E. (1989). *Emergent literacy: New perspectives* in D. S. Strickland & L.M.Morrow (Eds.), Emerging literacy: Young children learn to read and write. Newark,DE:International Reading Association.
[21]Ferriero, E., & Teberosky, A. (1982). *Literacy before schooling*. Portsmouth, NH: Heinemann.

1.3 Objectives of the programme

The Early Literacy Programme has been pursuing the fulfillment of several objectives since its inception:

- To address early literacy as an area of special focus with an understanding of its pedagogical & theoretical implications.
- To initiate dialogue and attention on the pedagogy of reading and writing in early years.
- To create a cadre of teachers well acquainted with pedagogy of reading & writing.
- To associate reading with the experience of joy and pleasure.
- To enable children to become motivated readers and writers with sustainable and lasting reading skills as they graduate out of primary schools.

To achieve these objectives, the ELP, NCERT had undertaken the implementation of a pilot project and a number of activities like developing an understanding of pedagogy of reading and writing amongst teachers and officials, developing a body of literature on early literacy to support the programme and also to sensitize and create awareness about the need for early literacy among educationists, policy makers and planners.

The Early Literacy Programme has attempted to break the narrow notion that learning to read is dependent only upon textbooks. The programme emphasizes on using children's literature in the classroom to provide children with an environment conducive to reading. The Programme focuses on understanding the processes of reading and writing in primary school years, moving away from the mechanical engagement with literacy. Reading and writing are understood as developmental processes and an early literacy classroom is an unhurried, relaxed space for teachers and students to enjoy the processes of reading and writing. Children in an early literacy classroom should have easy access to children's literature with the freedom to browse through them with pleasure. The books are free from the burdens of textbook learning and provide opportunities for children to share the pleasure of reading with their teacher and the peer group. Children's literature provides opportunities and freedom to engage with books and develop familiarity with them.

> ❖ Emergent literacy is the idea that children grow into reading & writing with no real beginning or ending point.
>
> ❖ Orientation programmes need to engage the teachers with the nuances and complexities of the processes of reading and writing and address the classroom practices and needs.
>
> ❖ The pedagogical practices should be based on strong theoretical grounds.
>
> ❖ Reading is essentially a process of meaning making and comprehension is an integral part of reading. It is not a new or an added skill that has to be learnt for reading.
>
> ❖ Writing is an act of meaning making. Children use their previous experiences and other contextual cues to compose meaningful text in their writing.
>
> ❖ The programme emphasizes on using children's literature in the classroom along with textbooks to provide children with an environment conducive to reading.

1.4 Mathura Pilot Project - Early Literacy Programme

NCERT launched its pilot project in the Mathura district of Uttar Pradesh in the year 2007. The project was initiated to understand the implementation of a meaningful process of reading and writing in the schools in our country, the resources that need to be mobilized and understand how the pedagogical practices can be evolved for sharing with the country. **The pilot was an exploratory study to understand the processes of a language programme that focuses on print rich environments, reading and writing with comprehension, use of children's literature is implemented in the classrooms in our country. The project also aimed to understand the conditions that would support or hamper this teaching- learning process.**

1.4.1 Mathura as the field for the project

Mathura was chosen as the ground for the pilot project because it is representative of a rural district in the country with low literacy rates. Secondly, it was thought to involve all the institutions and systems in the project so that necessary support is available and institutionalized during the duration of the project and long-term sustainability is ensured. In Mathura, DIET was functional and catering to the large number of schools in the district. Thirdly, it was suggested to choose schools from a rural background and yet, proximity to the NCERT headquarters was important. Based on all these considerations, Mathura was chosen as a field for the pilot project.

Five blocks of the Mathura district were chosen for the project. These blocks were chosen as geographical representation of the district as these blocks are located and spread across the length and breadth of the district.

The project covered all schools spread in five blocks of Mathura district i.e. a total of five hundred and sixty one schools. It served as a testing ground for all the activities of the programme. The objectives of launching the pilot project in the five blocks of Mathura were:

(i)   to understand the processes when a focused literacy programme for grades I and II is implemented in the classrooms in government schools.
(ii)   an experimental ground for designing, evolving orientation programmes and publications.
(iii) to understand the conditions that could support or hamper the teaching- learning process considering the pedagogical practices undertaken.
(iv)   to plan the intervention strategies and develop material.
(v)   to build capacity of teachers through series of orientation.

Based on these objectives, the third section shares the interventions undertaken in the pilot project at length.

Besides the Mathura Pilot Project, the Early Literacy programme also undertook other activities every year. These activities were also centered on objectives of the early literacy programme as discussed earlier.

1.4.2 Collaboration with States/Union Territories about Early Literacy Programme

One of the primary objectives of the programme has been to engage the entire country in an informed dialogue on early literacy. The programme aims to bring the attention of educationists and policy makers on the importance of early literacy.

The process of establishing a dialogue with states has been an important objective from the beginning of the programme. Experiences from the field have been shared with the States and Union Territories. States/Union Territories have been supported and encouraged to engage with the process of early literacy and understand its nuances. This also involved developing the understanding of the State teams about early literacy and giving them opportunities to delve into the intricacies. The programme engaged in dialogue with States/Union Territories with the following focus points:

(i)   The Early Literacy Programme suggested the states to focus on processes of reading and writing in grades I & II exclusively. Any programme developed by the state should revolve around promoting this understanding of early literacy and engage its teachers and teacher educators in a theoretical and informed dialogue on early literacy.

(ii)   Grades I & II are the site of action as far as literacy learning is concerned. The first two years of school are the most crucial years for acquiring sound and long lasting reading skills. These skills form the basis of learning in school.

(iii)   The programme should be viewed as a comprehensive and independent effort without any attempt to club it with any other existing programme. Spreading the programme to other grades will dissipate the energy in areas where work is already in action. The efforts will bear far- reaching results if a concentrated effort is made in these two grades.

(iv)   A core team should be constituted exclusively for carrying out and monitoring various activities of early literacy in states. The members should include representatives from SSA, SCERT and DIETs. There should be clearly defined roles and responsibilities for the members.

(v)   The Early Literacy Programme suggested the States/Union Territories to adopt a multi-pronged strategy to address the issue of reading and writing in early years. There should be a variety of activities of the cell to address issues at the level of classroom practices, capacity-building of teachers, and preparation of material compatible with the progressive understanding of reading.

Some States/Union Territories have implemented and are in the process of implementing a specific literacy programme for grades I and II based on the Early Literacy Programme of the NCERT. Some States/Union Territories have been using the graded reading series developed by ELP and some have also translated/ adapted the series in their regional languages.

1.4.3 Videos programmes on classroom processes

To further enhance the understanding of early literacy and to enrich the teacher orientation, audio and video programmes have been developed. The following videos have been developed as part of the ELP:

- Kahani aur avsar padne likhne ke
- Kavita aur avsar padne likhne ke
- Aaj ki baat

These videos highlight and talk about activities like story telling as important components of reading and writing, using literature in the classroom, graded reading series *Barkha*, good children's literature, classroom activities like morning message. These programmes have been found to be very helpful in the teacher orientation programmes in strengthening the concepts of reading and writing.

A collection of audio spots on early literacy focusing on the importance of talk, free and independent reading time, acknowledgement of children's home language and meaningful attempts at reading and writing in early literacy classrooms have also been developed.

1.4.4 National seminar on Early Literacy

A national seminar on Early Literacy was organized in February, 2012 at the NCERT. The seminar was organized to deliberate specifically upon the existing scenario of pedagogy and curriculum of early literacy in the country. The seminar had paper presentations, poster presentations and panel discussion on **'**Challenges in the implementation of Early Literacy Programme'. SSA officials, teacher educators, teachers, research scholars, representatives from NGOs from different parts of the country participated in the programme.

Section: 2

Methodology

SECTION 2
Methodology

The Mathura pilot project on early literacy has been implemented in five hundred and sixty one schools in five blocks (Goverdhan, Chaumuha, Naujheel, Raya and Farah) of Mathura district since 2008. The pilot project focused on capacity building of teachers of grades I and II in order to change the pedagogic practices and literacy environment in school so that children in these grades learn to read and write with meaning.

Since the pilot project was implemented with the objective of understanding the impact of the pedagogical approach, classroom implications and utilisation of available resources as described in Section 1; it was necessary to assess the change that had taken place in the school environment, teaching practices adopted by teachers; and the physical environment of the classroom and its impact on student learning.

The End-term survey was conducted in October 2012. Forty seven schools from all the five blocks were selected for the study.

The end-term study was planned based on the following **objectives**:

- To assess the prevailing status of reading in schools post the interventions.
- To assess the effectiveness of pedagogic practices adopted in schools.
- To assess the literacy environment at school and at home.

2.1 Sample

The pilot project was implemented in all the schools of the five select blocks of Mathura district. When the project was launched there were a total of five hundred and sixty one schools in the five blocks. Over the period of five years of the implementation of the programme, new schools were being added in clusters of the five select blocks but the intervention remained with the schools those were there from the beginning of the programme. The following table provides block wise number of clusters and number of schools. The total coverage in the pilot was; forty seven clusters, five hundred and sixty one schools, twelve hundred teachers and forty thousand students in grade I and II.

Table No. 2.1

SNo	Name of Block	No. of clusters	No. of Schools
1	Choumaha	8	90
2	Goverdhan	8	107
3	Naujheel	13	141
4	Raya	10	148
5	Farah	8	98
	Total	**47**	**584***

Source: BRC, December 2011

*Over the period of 5 years some more schools have been added in the clusters but the project intervention remained with the 561 schools chosen initially

While planning the end-term survey, it was decided to cover all the blocks and select a representative school from each of the forty seven clusters. This selection of school was done on a random basis. At the time of the study, thirty eight schools could be covered due to accessibility and time-constraints.

Since at the time of the base-line study, students of grade III were assessed for their reading and writing abilities; it was decided that for the end-term survey, students in grade III will be assessed in order to have comparable data. For the end-term survey, all students of grade III present at school on the day of data collection were covered. A total number of three hundred and thirty three students were covered in the study.

2.2 The design of the tool

The objective of the study was to assess the change in reading, writing and comprehension abilities of children and capture the learning environment including practices at school and at home. The tool has been developed keeping in mind the theoretical framework of the Early Literacy Programme. The tools were developed to capture the changes in the strategies used by children for reading and their comprehension ability. The tool was divided into three parts: writing, reading comprehension and literacy environment of children.

The tool used in the end-term survey was similar to the tool used in the base-line study except that in the end-term survey, the unfamiliar story was replaced. The story was replaced as it was no longer an unfamiliar story for them. This particular story was in the form of a book available in the Reading Corner in the classroom as part of the intervention. Therefore, a new story was chosen to replace the unfamiliar story used in the base-line survey. The tools were developed in-house at the time of the baseline in consultation with then Director, NCERT and faculty members of NCERT. The tool was finalized after conducting a pilot with students in grade III of government schools in Mathura and Delhi. For the tool used in the end-term survey, refer to Annexure- A

The tool has four sections. The first section of the tool includes questions that children had to respond orally and also provide written answers. Children were asked to write familiar words dictated to them followed by recognition of letters in the words.

In the second and third section children were asked to read two stories, one familiar and the second an unfamiliar story, followed by some questions based on the story. The familiar story was selected from grade II language textbook being used in project schools. This story was the same in the baseline and the end-term survey. The unfamiliar story selected in the base-line was replaced with a new story for the end line. The two stories were of comparable complexity. The tool had scope to capture a range of responses of children starting with children declining to refusing read to children being able to answer all questions of the story. Children were asked to read some words selected from the story. Questions based on the story to assess comprehension were asked only if children could read the entire story. The field investigator was expected to note any qualitative observations of how children read the story. The third section of the tool had questions to understand children's access and exposure to print material including children's literature and story-telling in school and at home. Children have been asked questions specific to exposure to children's literature. Children were also observed on their handling of the print material which the investigator was expected to record.

2.3 Data Collection Procedure

The end-term survey was led by the Early Literacy Team at NCERT. The study was done over a period of five days in October 2012. An eight member team for data collection included members from the Early Literacy Team and some external researchers who had appropriate professional qualifications and had prior experience and conceptual understanding of early literacy. The team participated in a one day orientation. The orientation programme was on theoretical inputs about early literacy, the details of the implementation of the pilot project and an understanding about the tools developed for the study. The team discussed each section of the tool in detail and how to administer it with children.

The data collection was done in two phases. In the first phase, three blocks were covered and in the second phase two blocks were covered. The team completed data collection in one block before moving to the next block. The entire team visited a school with prior information to the school. All students of grade III present that day were interviewed on a one on one basis. The time spent with each child was anywhere between five minutes to thirty minutes depending on the number of items completed by the child.

2.4 Data Analysis

The data collected from children who participated in the study includes both quantitative information as well as qualitative observations of the filed investigators. The quantitative data has been analyzed by using simple percentages while largely the analysis is qualitative.

The qualitative analysis of data has captured the different strategies for reading adopted by children. The detailed observations made by the field investigators provide a rich repertoire of the multiple strategies and stages of reading that children are at in grade III. This qualitative analysis is further enhanced by providing profile studies of children. These profiles are representative of children who participated in the study.

The analysis goes on to describe the different reading and writing behaviours demonstrated by children which is reflective of the classroom teaching practices adopted by teachers.
The third section of the analysis is on the learning environment available for children. This is based on the responses of children to questions on exposure to print and story- telling at school and home.

A comparison has been provided between the base-line and the end-term survey on different aspects related to children's reading and writing behavior.

The quantitative analysis of data from the end-term survey is placed in tables available in the Annexure-B

2.5 Challenges and delimitations

Like any research, the journey of conducting the end-term survey had not been smooth or perfect; there were many challenges in conducting the survey that came forth.

- At the time of sampling, it was decided to cover one school from each of the forty seven clusters. However due to constraint of time and other resources only thirty eight schools could be covered.
- It was challenging to find people with understanding of the nuances of early literacy. Hence, there was limited human resource for conducting the survey.
- In order to keep the design of the end-term survey similar to the base-line, teachers have not been included as key responded in the study. This has resulted in not being able to make direct correlations of student learning to the change in classroom practice adopted by the teachers.
- As the understanding of the programme team evolved during the implementation of the pilot, the data collected in the end-term survey was more detailed as compared to the base-line survey, which may result in not being able to show a before and after situation on certain aspects of the programme.
- The programme relied on teacher's understanding of the renewed pedagogical practices to implement the changes in classroom practices. By not including them as respondent's in the study there are limitations in the analysis of data
- The research design of the end-term survey did not include a control group hence, it is difficult to compare the learning of students in intervention schools with non- intervention schools.
- The analysis of the study does not factor for any background variable related to school, teacher and home environment which may result in a limited analysis.
- The data collection of base-line survey does not have disaggregation for gender; place (rural/ urban) and social groups, it rather focused on classroom processes. Hence no comment has been provided on these aspects in relation to reading. Thus, it was not considered during the end-term survey as well.

Section: 3

The Mathura Pilot Project

SECTION 3
The Mathura Pilot Project

The Mathura Pilot Project was conceptualized in the year 2007. It was the experimental ground for implementing the activities of the Early Literacy Programme. This section shares the details of the interventions made under the project at Mathura.

The project covered **five hundred and sixty one schools of Mathura district of the state of Uttar Pradesh**. All these were government primary schools. These schools had concrete buildings with at least four- five rooms. Most of the teachers teaching grades I and II were para- teachers.

The work undertaken in the project can be broadly divided into three phases i.e. Preparatory phase, Implementation and Monitoring phase and Term-end phase. These phases did not have fixed boundaries but overlapped as certain activities continued throughout the implementation phase. Development work taken up in the first phase achieved final result after it was implemented with teachers. The need of teachers led to development of more material, redesigning orientation programmes, channelizing the processes of monitoring etc.

2007 ⟵⟶ 2008 ⟵⟶ 2012

Preparatory Phase	Implementation and Monitoring Phase	Term-end phase
- Base-line survey - Children's book fair - Selection of children's literature - Development of Graded Reading Series - *Barkha* - Material for teachers- *Padhne Ki Samajh*, Reading for Meaning , *Padne ki Dehleez par* , Padna sikhane ki shuruaat - Training of Master Trainers - Reading corner in project schools - Collaboration with States/ UT's	- Master trainer's orientations(every year) - Teacher's orientation Programmes (every year) - Refresher Programme for Teachers (every year) - Development of Tools for Monitoring - Orientation of Monitoring Team - Monitoring - Phase I and II - Block Review teams - Video Recording of classrooms Publication of children's magazine - Development of audio-video programmes on early literacy - Material for teachers- shuruati lekhan ek samvad (under publication) - Collaboration with States/ UT's (every year)	End-term survey

3.1 Preparatory Phase

(i) Base-line Survey

A base-line survey was conducted to understand the status of reading among children in schools and assess the literacy environment at school and at home. The base-line survey was done in a systematic manner to understand the impact of classroom practices and design the interventions accordingly.

Since the focus of the Mathura Pilot Project was on children studying in grades I and II, it was decided to do the base-line survey of children in **grade III.** In doing so, it will give us an actual picture of the status of the processes of reading of children who have already spent more than two years in the school learning to read and write. It was a challenging task to develop the tool which would give us an informed idea about the pedagogical practices in the classroom reflected through a repertoire of children's reading strategies. The tools for base-line survey had been developed keeping in view the theoretical propositions about research in this area as well as issues in early reading. The tools were developed in-house in consultation with the then Director, NCERT, experts in the field of early literacy and faculty members of NCERT. The tools were finalized after conducting a pilot with students in grade III of government schools in Mathura and Delhi.

Of the five blocks of Mathura, schools of three blocks were chosen for base-line study as these blocks were considered to be representative of the district. These blocks were Choumuha, Goverdhan and Fareh. The data was collected from forty two schools in selected blocks.

The tools were administered by the field investigators and NCERT faculty. Prior to administering the tool, investigator were given two days orientation which entailed discussion on how the investigators would administer the tool.

The design of the tool

To assess the reading of grade III children, two stories were chosen, one familiar and another unfamiliar story. The familiar story was taken from their grade II Hindi textbook and the unfamiliar story was from a children's literature. They were assessed on their reading and their handling of books too.

Tool for the base-line survey was divided into three parts;
- writing
- reading comprehension
- literacy environment of the children

The base-line survey revealed that while reading, children were struggling to decode and join letters. The data revealed that there were children who either did not attempt to read the story or were able to decode the story but unable to comprehend it. Children also struggled to write their name, the name of their village and familiar words given to them. The data also revealed that children did not have any print material available other than their textbooks. They were hardly told any stories in school. If any, those were stories from the textbook itself. Survey revealed that both, children and teachers had little or no access to the world of literature and print. Some of the field investigators reported that the walls of the classroom were bare or there were quotes on moral values which were not indicative of a print rich environment at school.

3.2 Implementation Phase

The interventions were given in the following manner:
⇨ Providing inputs to children through material
⇨ Awareness generation

⇨ Providing conducive print rich environment
⇨ Material for teachers
⇨ Regular training of teachers
⇨ Regular monitoring

(ii) Development of Material for Interventions

Based on the results of the base-line survey, the following interventions were made:

❖ **Providing material for children**

➢ **Select Children's Literature**

Keeping in view the lack of availability of relevant and meaningful print and reading material for children and teachers, it was important to create opportunities for reading and provide them with meaningful and relevant books for reading. The programme had undertaken a process of selection of children's literature relevant for children of grades I and II. The selection was done on the basis of the criteria like richness and variety of illustration, coherent and simple storyline, natural and context-based language, predictability of phrases and words in the story, use of repetitive words, phrases, verses and episodes etc. **A set of approximately ninety selected books was provided to each classroom of the project school.** This process was undertaken in the year 2008. It also involved selection of books for school libraries. This list was shared with project schools and all States and Union Territories.

Based on the need of the field and interaction with states, it was felt that the updation of children's literature in school libraries and reading corners should be a continuous process. Therefore, this process of selection of children's literature was undertaken again in the year **2012-13.** Through this selection, an additional **forty six books were selected in Hindi and thirty three books in English at two levels- grades I - II and III- V.** The book list is available on the NCERT website.

➢ **Graded reading series:** *Barkha*

An important objective of this activity was to **develop a graded reading series which can be read independently by children of grades I and II.** A graded reading series titled *Barkha* was developed in consultation with educationists and experts in the area of early literacy. The stories in the *Barkha* series provide children with the scope to make prediction about the text by making use of the detailed illustrations.

The series comprises of a set of forty books along **with a brochure in Hindi and English**.

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There are four levels in the series spread across five themes. The themes are:

- *relationships*
- *animals*
- *musical instruments and games*
- *things around us*
- *food items*

The four levels in the Barkha graded reading series are:

First level – Every theme has two stories. Each story has one sentence with an illustration on every page. Only one event takes place or one problem is solved in the entire story. There is repetition in the syntax which helps children in recognizing the words.

Second Level – There are two stories of each theme having two text sentences on every page. The number of words has been increased. There are illustrations on every page at this level as well. Here, too, there is repetition in the syntax; however it is less than the first level. At this level also the stories revolve around one event or one problem at a time.

Third Level – There are two stories from every theme with three sentences on each page of the book and the number of words has been increased as compared to the second level. Two to three smaller events or sub-plots have been developed within the main plot. There are illustrations on every page to give flight to children's imagination.

Fourth Level – There is one illustration and four sentences on every page of all the stories. Stories have two to three plots which lead to increase in the number of words. There is a repetition in the plots but very little in the syntax.

Each level has ten stories. The stories have been developed on the basis of children's daily experiences. Efforts have been made to incorporate life's simple joys in the stories.

These sets of *Barkha* series were given in classes I and II of project schools

➢ **Children's magazine:** *Firkee bachchon ki*

The magazine *Firkee bachchon ki* caters to the needs of children in grades I and II by providing them with relevant, interesting reading material in a simple format. The first issue of the magazine was released in the year 2011. '*Firkee bachchon ki'* focuses on providing children with reading opportunities in Hindi & English through relevant, age-appropriate and culturally familiar material. It includes features like rhymes, stories, language based activities and corresponding illustrations to support the reading of text.
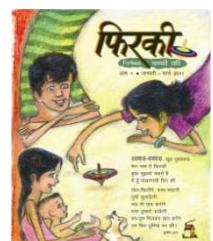
These materials were kept in the Reading Corners in the classrooms.

❖ **Designing and creating reading corners**

Children's literature is an important component of a language programme for young learners. It not only supplements and complements the textbook but also creates a meaningful and relevant print-rich environment in the classroom. Keeping this in view and the lack of availability of

reading material as observed during the base-line survey, the programme designed and created such a corner in every project school where children can read at their own pace in a relaxed manner. Reading Corners meant a space which allows easy access to children's literature with the freedom to browse through them with pleasure. Some important points for setting up reading corners include:

- Material within the reach of children

- Easy and comfortable display

- Provision of stationery

- Variety of good children's literature

- Independent reading time for children every day

Book racks and shelves were provided to all the project schools for setting up Reading Corners in grades I and II. The graded reading series and selected children's literature was made available in every classroom. Brochures for reading corners have also been developed.

❖ **Providing Material for teachers**

The programme was implemented with the purpose of creating a cadre of teachers well acquainted with the **pedagogy of reading and writing**. There was a need to generate a dialogue with teachers to help them understand the nuances of the reading process. The material for teachers was designed addressing their needs and issues related to reading. Initially, the focus was more on reading but the belief was that reading and writing cannot be isolated. Therefore, a manual was developed focusing on writing and aspects of early literacy.

 The following material has been developed for teachers:

➢ *Padne ki Samajh (पढ़ने की समझ)*

The manual focuses on the understanding of pedagogical aspect of reading focusing on various aspects of early literacy. It also provides guidelines for conducting orientation programmes for teachers on the concept of reading. This publication is available in Hindi and can be used by teachers and teacher trainers.

➢ *Reading for Meaning*
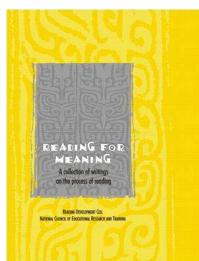
It is a compilation of articles and papers considered to be classics in the field of reading. These writings approach reading from different angles but converge at the central point of comprehension. This publication is available in English.

➢ *Padne ki dehleez par (पढ़ने की दहलीज़ पर)*

A collection of articles highlighting the issues in reading in the

Indian context. It aims at equipping the teachers with an understanding on early literacy so that they can be decision makers about pedagogical issues and are able to function as reflective teachers. This publication is available in Hindi.

➤ *Padna Sikhane ki Shuruat* (पढ़ना सिखाने की शुरूआत)
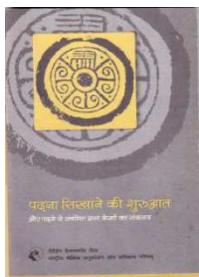
This book aims to help teachers develop an understanding about reading and includes articles on related aspects. It also gives an introduction on the '*Barkha'* series published by NCERT. This publication is available in Hindi.

➤ *Shuruati Lekhan- Ek Samvad* (शुरूआती लेखन-एक संवाद)

The manual focuses on the understanding of the pedagogical aspect of writing in early years, assessment of children and the linkage between reading and writing. Insightful experiences of teachers highlighting the pedagogical and administrative aspects of the classroom have also been included. It also focuses on developing an understanding on the importance and usage of children's literature in an early literacy classroom and examples mentioned in the manual will enable teachers to understand the possibilities of creating meaningful practices and changes in the classroom. This publication will be available in Hindi.
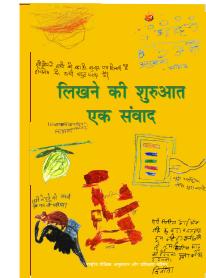
➤ Posters on Early Literacy

The posters developed by the programme are used during orientation progarmmes. The set of five posters focus on the importance of reading in the early years, highlight the developmental stages of writing and give a glimpse of reading corners in early literacy classrooms.
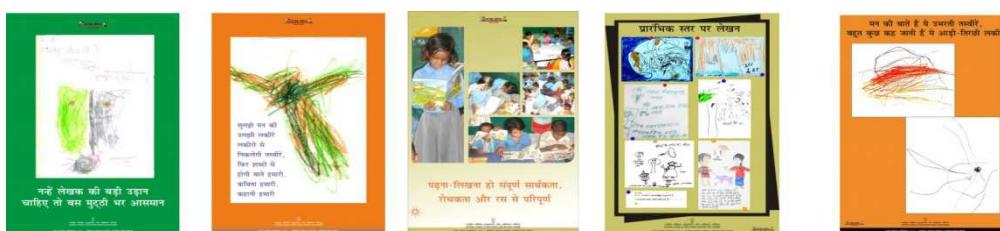
❖ **Pustak Mela: Awareness generation**

Through the project, efforts were made to reach out to the community and spread the word about the importance of reading in early years. The project aimed to create a culture of reading in schools and draw support from the society as well. For this purpose, a three day book fair was organized at Goverdhan block in Mathura district from **8th to10th March 2008** to bring the school and community together with the world of children's literature. A variety of activities were organized along with display of books. Publishing houses and organizations had put up bookstalls and conducted activities. **Local community, teachers** and **about five thousand children participated in the fair.**

Twelve publishers displayed **sixty thousand books** in the fair**. Books were distributed free of cost to children**. The following activities were organized in the fair:

- **Street play** and **puppet show** in local language strongly communicated the importance of a culture of reading to the public.
- Posters were used a medium to share the concept of reading for pleasure.
- **Local folk-story tellers** sat throughout the day with groups of children and narrated various stories.
- **Discussion sessions with teachers** were organized on significance of a detailed understanding of the process of reading.
- **Puppet making, bioscope show, origami, art work,** screening of **movies** were other activities at the fair.

❖ **Orientations of Teachers**

Teachers have a critical role in the implementation of this programme. It was important for us that teachers should understand the concept of Early Literacy Programme to be able to successfully implement and grow with the programme. It is teacher's creativity, high motivation level and will to do that helped and supported in implementation of the programme in the classrooms. Orientations were organized with teachers on the concept of early literacy. The **orientations involved interactions with twelve hundred teachers**. Besides teachers, forty seven Nyaya Panchayat Resource Co-ordinators, ten Assistant Block Resource Co-ordinators, five Block Resource Co-ordinators were also involved to provide support and academic assistance to teachers.

The **orientation programmes were conducted every year**. A group of **Master Trainers** comprising of BRCs, NPRCs, ABRCs and teachers had been formed who supported NCERT team in organizing orientation. These Master Trainers were given a separate orientation every year before they conducted sessions with teachers. This group of master trainers was re-constituted every year for academic support in the field.

The refresher programmes for teachers and co-ordinators were conducted after a gap of three to five months of the main orientation to discuss the achievements and challenges in the implementation and provide academic support to teachers. The details of orientation programmes are available in Annexure D.

❖ Monitoring

Monitoring had been a process by which the NCERT team could stay connected to the teachers and Cluster and Block officials at Mathura. Monitoring helped to map the qualitative progress of the program and understand the realities of the field. The feedback was collected during monitoring to understand the challenges occurring in the implementation and plan further actions.

In Mathura Pilot Project, the monitoring was carried out in a **phased manner**. It was conducted in two phases. The tools for monitoring were developed through a number of workshops with the participation of various experts in the area of elementary education, experts from NUEPA, other former faculty of NCERT, SSA officials of Uttar Pradesh, the district coordinator of SSA Mathura, Consultant from MHRD and faculty members from NCERT.

The first phase, that started in December **2008** focused on:

- Availability of material in the classrooms (children literature, *Barkha*, mats etc.)
- Physical condition of the schools and classrooms environment**.**
- Classroom activities related to literacy.

Monitoring Phase I was conducted by Master Trainers and faculty members of NCERT. It consisted of feedback from teachers and Master Trainers based on their classroom observations.

Monitoring Phase II started in November **2009.**The tools were developed with the following objectives:

- Observation of the school and classrooms environment**.**
- Teachers understanding of pedagogy of reading and writing.
- Observation of classroom activities related to literacy.
- Usage of textbook in the classroom
- Community awareness about the program.
- Self assessment by teachers.

The Monitoring Phase II was carried out by NPRCs and NCERT Team. The tools were administered and a meeting was conducted with NPRCs to understand and analyze the existing situation. NPRCs shared their experiences and challenges faced in the field.

The feedback forms/ schedules prepared for monitoring were based on **observation** and **interactions with students, teachers and parents**. One of the major objectives of monitoring was to determine **teacher's understanding about reading and writing pedagogy** and nature of literacy activities conducted by the teacher in the classroom **based on orientations** conducted at various intervals.

Gradually, it was stressed and discussed with Block and Cluster level Co-ordinators that monitoring is not about inspection and supervision. It involves providing regular academic support to teachers.

Block Review Teams

Based on the feedback of Monitoring Phase II, there was a need to strengthen on-field support & regular follow-up with teachers. Therefore, a five member Block Review Team was created in every block comprising of teachers/ NPRCs/BRCs who were in the process of developing a good understanding of the concept of early literacy and could take a leadership role in providing support to teachers in project schools. Orientations of the Block Review Teams were organized and monthly work plans were discussed so that teams could provide systematic support to schools in their blocks.

However, due to numerous administrative responsibilities on the team members, large number of schools for each co-ordinator and the given distances, the functioning of the team was not completely successful.

Cluster level support

After the teacher orientation programmes in the year 2011, a need was felt to strengthen teachers's understanding and give them more space to raise their challenges and concerns. Therefore, it was decided to provide academic support at cluster level in every block. Teams from NCERT visited every cluster and discussions were organized with teachers, NPRCs and Head Masters in smaller groups. The content of the discussions focused on a range of issues like classroom practices, usage of reading corners, planning activities.

3.3 Roles and Responsibilities

The Early Literacy Team at NCERT had the following roles and responsibilities in the Mathura Pilot Project:

- Selection and development of reading materials for children (Classes I and II).
- Designing 'Reading Corners' in grades I and II of the selected schools.
- Orientation of teachers in reading- writing pedagogy and mechanisms of assessment.
- Creating awareness among teachers as well as community for developing a reading culture.
- Devising strategies for wide dissemination of existing and new developed reading materials.
- To initiate the publication of a children's magazine.
- Designing and conducting orientations for teachers, NPRCs, ABRCs, BRCs.
- To evolve supportive mechanism for regular monitoring of the teachers and support the Mathura team in monitoring.

Roles and Responsibility of Team at Mathura (that includes NPRCs, BRCs, BRT and District Co-ordinator etc.)
- To support the NCERT team in all the above mentioned activities.
- To provide regular monitoring and support to teachers in the
  project schools.

3.4 Challenges for the Programme team

- Finding experts with understanding of concept of early literacy has been a difficult task.
- It was a challenge to explain it to the concerned people involved at various stages that bringing change in the teaching- learning process and the education system is a slow process. Hence time and flexibility was required.
- Inspite of efforts, the involvement and support from DIET was minimal.
- The academic initiatives at the level of BRC, NPRC were lean and did not provide the required support to the teachers. Most of the Head Masters also did not encourage and support the teachers in their work.
- NPRCs were more active in their administrative role than in their academic role. Getting academic support from NPRCs was a challenge. They did not consider providing academic support to teachers and monitoring as an essential part of their work. Secondly, the frequency of NPRC mobility in their clusters was very low due to other responsibilities.
- There were schools with only one teacher which made it very difficult for teachers to focus on qualitative academic activities in school.
- Educational qualifications of para-teachers and pre-service teacher orientation are lacking or are not up to the mark. Teachers felt the need for a regularised orientation.
- Due to low salaries, para-teachers engaged in other work apart from their school work to make ends meet. They were often out of school during school hours.
- Teachers are given various administrative duties which led to their long term absence from school.
- Transfer of teachers, NPRCs and BRCs posed a major problem as when new people joined, the ground work had to be redone.
- There is no provision for any reading material/ newspapers for the teachers.
- Given the constraints: catering to a large scale. Due to constraints of adequate human resource and other logistic issues, monitoring of the schools from NCERT could not happen as planned.

Section: 4

Analysis and Interpretation

SECTION 4

Analysis and Interpretation

This chapter discusses the qualitative and quantitative analysis of the end-term survey data. The analysis is based on the reading-writing responses of children to the questions and the observations made by the investigators.

The qualitative data has helped to understand the variations in reading and writing abilities of children. This kind of analysis has made clear that children should not be slotted into the categories of readers and writers or non- readers and non-writers. This analysis helps us understand that it is important to reflect the dimensions through which children's reading and writing skills can be developed. The analysis has attempted to highlight not just the achievements of children but has also brought to fore children's reading and writing behaviours that continued to have a strong hold in the schools despite the interventions.

In the base-line survey writing as a process was not focused as much as reading and the same tool was used in the end-term survey. The tool had a small section on writing and this information was used in qualitative analysis to discuss the writing behaviors' of children. Reading on the other hand, was assessed through various dimensions like comprehension, children's developing understanding of the conventions of print i.e. how the print material (text of familiar and unfamiliar story) was held, the sense of directionality of the reading script(like in Hindi, the text is read from right to left and top to bottom). The tool also looks at children's repertoire of reading strategies, their understanding of a story-structure and exposure to a range of literature. All these seen together present an overview of the process of children becoming independent readers along with the pedagogical practices used in the classroom.

The analysis of the data is presented in two sections. The first section discusses the quantitative data collected on parameters related to children's development on reading and writing. The following section provides a discussion based on the qualitative analysis of the data. This is presented through several case studies of children covered in the survey. These case profiles explain the reading – writing behavior of children observed during survey.

4.1 Status of reading in schools under Mathura Pilot Project- A Quantitative Analysis

Reading with comprehension has been the focus of the Early Literacy Programme. Reading and writing have always been understood and promoted as meaningful activities in all its endeavors.
The data in the table 4.1 shows a comparison of performance of children in the base-line and end-term survey.

Table 4.1: Comparative table on base-line and end-term survey: Reading and writing behaviour of children

S.No.	Category	Percentage of Base-Line (%)	Percentage of End-Term (%)
1.	Children are told stories in school (Exposure to range of children's literature)	36	74
2.	Attempted to read stories through prediction or illustration or memory etc. (Children's confidence/risk taking behaviour vis.-a-vis. reading)	9	54
3.	Turned pages in both stories (Understanding of story structure/sense)	4	30
4. a)	Children read both stories and comprehended both stories	3	30
b)	comprehended only one story (Children are confident readers)	10	5
5.	Wrote their name, village name, familiar words and recognized letters (Children are conventional writers)	38	57
6.	Either wrote name/village name/familiar words and recognized the letters (Children are developing conventional writers)	28	39
7.	Did not write at all but recognized letters (Children are using and understanding print, letter-sound correspondence)	8	2
8.	Did not read and write at all(Children have not picked literacy skills)	25	2

It was observed in the Base-line survey that 25% of children did not attempt to the reading-writing tool. In other words, one-fourth of the class III children sampled during the survey were unable to write their name, the bare minimum criterion for declaring a person literate in India though they already had spent about two and a half years at school by then. In contrast, in the end-term survey **only 2% children did not read and write, which shows a considerable drop in the numbers. This point to a significant change during end-term survey. Also, in end term survey 57% of the children could write their names, village name, and familiar words and recognize letters in comparison to 38% children in base-line survey.** At the time of the Base-line survey it was observed that the teachers taught children using the standard practice of phonic identification. The survey indicated that 8% children did not write at all but they could recognize letters as compared to 2% in the end-term survey.

Another significant difference observed is that number of children attempted to read stories either using illustration or memory or another contextual cues are 54% which is evident of children's confidence in handling books. They are willing to take risks to attempt to read. This is in stark contrast with only 9% children demonstrating this behaviour in the base-line survey. An important factor behind this, as children reported, is that they were now told stories in schools. The presence of reading corners in the classrooms made books accessible to children and teachers both. 74% children in the end-term survey shared that they have opportunities to engage with books on a regular basis and are told stories in schools compared to a 36% children in base-line. These 36% children had reported the stories they were told happened to be stories from text books itself.

Of the children who read stories, 30% could comprehend both stories in the end -term survey where as in base-line, only 3% of children could comprehend both stories. Also, amongst the 25% children who did not read or refuse to read in the baseline survey, one-tenth of them could recognize letters. In the end-term survey, 23% children in did not read or refuse to read, but one-fourth of these children could recognize letters showing an improved letter sound correspondence among children. Children's exposure to and engagement with books helped strengthen their concepts about print and the format of a book and the story-structure. The reading corners were established in the project schools with this objective in mind i.e. availability of children's literature in the classroom for children to engage with and explore the world of print.

A child's handling of a book is also reflective of child's engagement with print. Children may hold the book up-side down or may start reading from the last page. Children may or may not find connections between the illustrations of a picture story-book and treat them as separate frames. During the survey it was observed how children negotiate with the pages of a story. Do they stop reading when they reach the end of the page or do they turn the page? Are they looking at the story as a set of disjointed sentences or they are looking at the print as a whole and have a sense of continuation on the next page? An important indicator of children demonstrating comprehension in the early years is when reading a book or a story, they turn the page. The survey revealed that 30% children turned the pages in both the stories in the end-term as compared to 4% in the base line survey. This aspect of how a child has dealt with the story pages is indicative of the fact that whether or not the child has a story structure or story sense in mind, implies that whether or not the child understands that the content of the text is not over even when the contents of the given page are over. All these indicators are suggestive of the fact that the child as a reader is actively engaged in the process rather than taking up the activity as a mechanical drill of decoding.

4.2 In-Depth Analysis of Qualitative data

The qualitative analysis of the survey data provides us with a glimpse of the different paths children have taken and are at different points in the development of literacy. Though the complexity of each child's context and the opportunities provided by the context has put her/him on a different trajectory, most of the children are geared towards a common objective of reading and writing comprehension. Attempts to read for meaning are reflected in profiles of children which is described later in the section. Children, who were seemingly non-readers, were able to predict the text with the help of illustrations or recall from memory (in case, they were familiar with the story) or produced an altogether new text but coherently tied together with a story line.

The following section describes children's reading and writing behaviors under various themes. These themes have emerged after a thorough analysis of the survey data and are indicative of the emerging literacy behaviours of children.

4.2.1 Literacy environment at school

Since children did not have exposure to print in their environment so the major part of the intervention was to change the literacy environment of the school. Thus, creating reading corners in classes I and II, creating print rich environment, providing display boards and creating space to enable group work etc. are some of the activities that could bring significant change in the level of engagement of children with print. Activities pertaining to creating a print rich environment in the project schools and making it functional as well as the practices that reflect the nuances of the pedagogy of reading and writing were discussed in the orientation programmes with the teachers. Some of these activities were morning message, independent reading time in Reading Corners, storytelling sessions by the teacher and carrying out weekly activities based on stories and poems from the children's literature made available in reading corner. These activities eventually contributed to creating print rich environment in the class and providing meaningful reading-writing opportunities.

Before intervention   **After intervention**
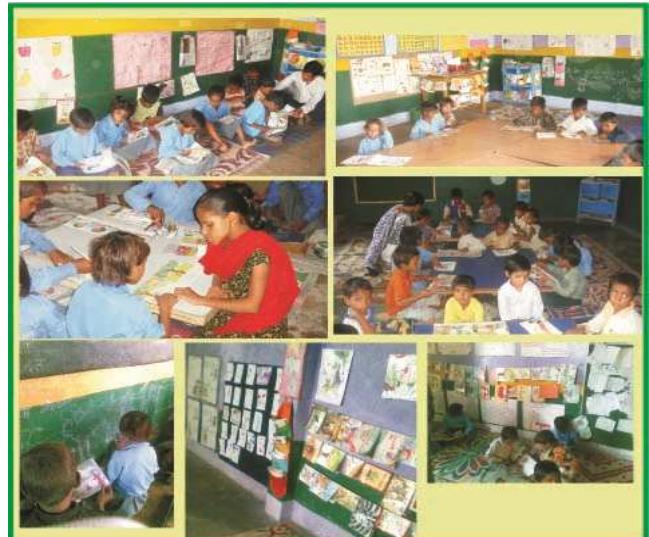
Since major thrust of the programme's intervention was to impact this area of classroom practices, we got similar indications in our quantitative analysis which depict this significant change that tells that appropriate children's literature was not only available for children but were used. **74% children interviewed in end-line survey shared that they were told stories in the class, whereas only 36% reported this during base-line**. It was further revealed that the stories were from textbook only. (Refer to table 4.1)

4.2.2 Interpretation of the findings: The centrality of comprehension

4.2.2 (a) Strategies for Reading: Ways children used to access the text/meaning

Readers read for different purposes. Differences in the purposes like reading for pleasure, reading for examination or reading for gathering information etc. set different goals for the reader. In the context of data collection, children were reading out to the researchers. In spite of the test like situation, most children came across as readers who were found engaging themselves with print. Their body language was generally free from hesitation or any visible reluctance to read. It was observed that children readily accepted the task.

Following were the kinds of strategies employed by children:

1. Prediction with the help of contextual cues and picture cues

Those children who used contextual and picture cues to read were successful in reading the story and comprehending the text. In this strategy, children tried to predict the words while reading with the help of contextual or picture cues. Some of the examples are given here to illustrate the strategy:

Example 1. A child read the line – जब फसल तैयार हुई from the story 'किशान की होशियारी' as जब फसल आई. The child substituted the words तैयार हुई with आई. This deviation from the text did not impact the meaning of the text.

Example 2. The word ईख appeared in the story ^किशान की होशियारी* a child when encountered गन्ना in the text, she read it as ईख. The line that cues given in the text was गन्ना बोया and the child read it a ईख बेचा. The words substituted were different. The child said गन्ना taking a cue from the illustration. बोया and बेचा are visually similar looking words. If we look at these words in isolation, they mean different but if we place these in the context of the story, this substitution does not make much difference to the overall meaning and context of the story.

Here, though students read words that were not given in the text, but their substitution of words were very close to the context and meaning of the story. Those who demonstrated usage of this strategy along with other strategies were found that they did not use non-words or inappropriate words in a particular context.

Children were also observed using pictures to help them read the text.

Example 3. In the story 'किशान की होशियारी' pictures of both किशान and भालू were given. Children took cues from illustrations of the story to read the words like भालू, किसान, गन्ना and many others.

It was found that prediction as a strategy was also used at different levels. Mostly, this strategy was used to predict the next word, but it was also used to predict a phrase, sentence, even the whole story. Many children tried to create their own stories with the help of illustrations. For example, a child from Chaumuha block predicted the whole story after reading the beginning sentence. A child from Raya also created her own story with the help of illustrations. She referred to all the elements of the

illustrations and spoke sentences on each element like पेड़, सूरज. Another child from Fareh also made the story on her own with the help of illustrations. She said –"मोटू लाल ने खाया पत्ता तो खट्टा लगा। आदमी बोला तुम मेरे पत्तों को खा गए" Those for whom the texts were familiar, familiarity in this case actually helped them to read as it acted as one of the support on source to predict.

The general observation was that children used various cues to comprehend and engage with the text. These cues included illustrations, experiences/ familiarity with the story, content of the story/ context and one's knowledge of language structures and rules.

Further during in depth analysis of the profiles of these children, it was noticed that exposure to print rich environment and stories being told by the teacher from reading corner had a direct correlation with use of this strategy. Children gave references of a lot of stories which they had been narrated to. It was also noticed that those students who were getting good exposure of print rich environment in the form of story-telling by the teacher and reading corner, were able to use this strategy more frequently.

2. Self Correction

Self correction was another strategy where children reflected and corrected one's own reading. The child read a word or phrase incorrectly, moved ahead, realized that the incorrect word does not fit in the context, came back and re-read the word or phrase correctly. For correcting themselves, children took the help of context.

In the survey we found examples of both kinds of attempts; children who made self corrections and children who did not make self corrections and read on...

Example 1. A child from Naujheel block, while reading unfamiliar text, 'दोस्त की मदद' 'read few words incorrectly but self corrected himself. In the line written 'कछुए को कहीं छुपने का भी मौका नहीं मिला', The child initially read the line 'कछुए को कहीं छुपने का भी मौका नहीं मिला', as 'कछुए को कहीं छुपने का भी माँगा नहीं मिला'. But as he finished the sentence, he realized that what he read wasn't meaningful or did not fit in the context of the story. He went back and read मौका as मौका. The child could do it because the use of माँगा affected the meaning of the sentence. The child realized it and self corrected it.

Example 2. A boy from Naujheel, while reading unfamiliar text, 'दोस्त की मदद' read few words incorrectly but self corrected himself like it was written 'कछुए को कहीं छुपने को मौका नहीं मिला', the child initially read मौका as माँगा माँगा but self connected and read the line as given above.

Many children used the picture cues to self correct themselves like this child who read तेंदुआ on the first page of the story. The first page of the story had no pictures. The child realized that the word spoken by him is not correct but did not know the correct word. On the second page taking a cue

from the picture of the leopard, the child read the word as तेंधुआ. There was a confidence when he read this word taking a cue from the picture.

Example 3 - A child from Fareh block, initially read आलू as भालू but corrected himself with the help of the contextual cues. When he moved forward and realized he read the word which does not fit in the context, he went back and corrected himself. " किसान ने भालू नहीं आलू बो दिए".

Example 4 - While reading the unfamiliar story दोस्त की मदद the child read "दौड़कर" as 'दौड़ी' but did not go back to correct as the deviation did not affect the meaning of what was being read.

These examples suggest that children had the awareness of when their meaning making process was getting affected. When children realized what they read was not coherent with the meaning being constructed, they made self corrections.

There were also instances where children did not self correct and read तकरीब as तसकी, तेंदुए जी as दे दो जी. It usually occurred with those children who were reading solely on the basis of letter recognition and blending of letters. In these situations, the decoding was being was being used as the sole strategy to read the text.

3. Decoding

(i) Only recognizing letters: In this strategy, the child was only recognizing the letters given in the word. For example, a child reads the words मथुरा, काजल, पीपनी, as म थ र क ज ल प न. Even while reading the text, she kept recognizing the letters but could not blend them to make a meaningful word.

(ii) Letter recognition, blending the letters and forming the words: In this strategy, children could recognize the letters blend them and form the words. For example, a child could successfully read the words – फसल, गाँव by blending the letters. It was observed that many of these words were familiar to themas they were a

Findings
- Children used cues from illustrations, content of the story, and their own experiences for predicting the text.

- Print rich environment in the classroom, reading corners, story-telling by the teacher, children's exposure to and engagement with print were found to be supported children in their process of comprehending the text.

- When children read with comprehension, they were aware of the fact as to when their meaning making process gets affected. When children realized what they read is not coherent with the meaning being constructed, they made self corrections.

- Children who were reading solely on the basis of letter recognition and blending of letters did not make self corrections.

- Children who were relying more on sounding out the letters and words found it difficult to read till the end of the story. This strategy was breaking the flow of their reading.

- Children's repertoire of strategies to read a text have increased to a great extent, compared to Base-line findings where more reliance was on decoding the text rather than reading for making meaning.

part of their context i.e spoken language and in story books as well; hence, blending and forming words became easier.

(iii) Letter recognition, blending the letters and forming the words (all the words): Children using this strategy could read almost all the words by recognizing the letters and blending them. As was observed, children using this strategy were focusing more on the sounds of the letters and words. This was also breaking the flow of their reading. The children who relied only on this strategy could not read the text till the end of the story. Also, such children could not answer to the comprehension questions.

Although, during the orientation programmes, teachers were oriented on the issues and difficulties of letter recognition strategy but it still was practiced. However, children could easily read out many familiar words like काजल, भालू as they are somewhere present in their context. There were lots of words spoken incorrectly when this strategy was used. This happened more with unfamiliar text.

Nevertheless, it was found during the end-term survey that children's repertoire of strategies to read a text have increased to a great extent, compared to findings of the base-line survey, where more reliance was on decoding the text rather than reading for meaning. The number of children using strategies other than decoding shows an increase. More than half the children (54%) were observed using various strategies during the end-term as compared to only 9% children in the base-line.

4.2.2 (b) Profiles: Children on the continuum of reading and writing

An important objective of discussing the case studies is to emphasize that children are not non-readers and non-writers. On the contrary, each child is on the path of development and their development should be supported by informed pedagogic practices, conducive classroom environment and other factors like opportunities to engage with print and reading and writing in general. All children who participated in this survey are readers and writers. There are few who have already become readers and writers in the conventional sense with a good grip over their reading and writing abilities. There are others who know some dimensions of reading and writing and are on the path of becoming conventional readers and writers.

The profiles presented range from children who have already become conventional readers and writers with a good grip over their reading and writing abilities to those who knew some dimensions of reading and writing and were developing on the continuum of reading and writing. These profiles highlight the reading- writing behaviors of children, which are also representative of several children in the classrooms of the project schools of Mathura. Each child's reading and writing profile has its own uniqueness. These representative profiles show impact of children's exposure to stories either through stories narrated by teachers or opportunities to read independently at the reading corner full of story books. At the same time, the select profiles also represent the continued presence and prevalence of teaching learning practices which are inadequate in helping children develop as independent readers and writers.

Case 1

A child from Naujheel block, came across as a confident reader and writer. She wrote her name and village name in the first section of the tool's item no.1 and 2. in clear, big letters.

मेरा नाम मनीषा है।

मेरे गॉव का नाम मीरपुर है।

The dictation of familiar words (Section 1 item 3 of the tool) was an easy task for her and she wrote them conventionally. She also wrote her name in English, even though she was not asked to. She also read the familiar and unfamiliar stories with ease and answered the comprehension questions. Unlike, most children in the survey, she could name her favourite storybooks. *Lalu aur Peelu, Billi ke Bachche* and *Hathi aur Khargosh* were her most loved stories. She shared that at home her father narrated stories even though she did not own books at home. At school, her teacher also told stories to children.

This child is a conventional reader and writer*. She has well-developed print concepts, uses conventional spellings, reads fluently for meaning.

Case 2

A child from Chaumuha block was writing confidently and close to conventional writing.

मेरा नाम रचना

में अझई में रहती हु

मथुरा कजल पीपनी

Apart from a few missing *matras* and *purnaviram* at the End of sentences, she displayed a good command over her writing. Her writing was closely approximate to the conventional writing. Her reading of the familiar story किसान की होशियारी was fluent. She resorted to decoding the text when she came across a word that posed a problem for her. Her decoding proved to be a successful strategy, whenever she used it. Her answers to comprehension questions were also coherent. However, the unfamiliar story revealed more about her reading abilities. She primarily used decoding to negotiate the unfamiliar story – दोस्त की मदद and started her reading from the second page of the story! What one can interpret is that her reading strategies and her choice of strategies is still not consistent and a new text unsettles her. She answered the comprehension questions, though the answer to one was unclear. She named a few stories from her textbook.

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* Operational definition here of conventional reader and writer is that those how are writing and reading as per conventions of print i.e. reading fluently, depicting usage of spelling, punctuations etc.

Case 3

A child from Raya block completed the writing section and read only the familiar story. His answers to comprehension questions were not coherent. The analysis of his reading and writing reveals that he seemed to be more sure of his writing. His writing is given below:

मार नाम विकास है। (मेरा नाम विकास है।)

मार गकन नमा ढ़पकर है। (मेरे गाँव का नाम ढकपुरा है।)

मथरी कजाल पपनी

(मथुरा काजल पीपनी)

This child was able to use the right letter or *matras* for a specific sound in most places. His spelling of नाम is inconsistent in the first and second sentence. His invented spellings are clearly indicative of his developing understanding of print and letter-sound correspondences. Like a regular writer, he ended his sentence with a *purnaviram*. His response during the interview showed his interest in books and stories. He named ten stories from the collection of books in the reading corner.

Case 4

A child from Chaumuha block read both the stories, though the reading of the two stories was different. She paused in between when reading became hard and predicted the text while reading the familiar story. She made up a lot of non-sense words while reading the unfamiliar story. For example,

तेऊ for तेंदुआ, अलग for छलाँग

But, despite these meaningless deviations, it seems she was trying hard to make meaning from her reading. For instance, in the beginning of the text लोमड़ी was read as लमड़ but towards the end of her reading, the structure of the story had guided her towards लोमड़ी. Her answer to one comprehension question was not an event in the story but was meaningful and logical. Here it is:

कछुए को बचाने के लिए लोमड़ी ने क्या तरकीब सोची?

"लोमड़ी ने कछुए को अपने ऊपर डाल लिया।"

Her writing reveals that she had a developing understanding over her writing.

मोर नाम नीलम है

में सीहाने गाटा में राह ती ह

मथरा काजल पोपान

She was able to get almost all of the sounds in these words. Her knowledge of *matras* was developing and she was making use of approximations to complete her writing.

Case 5

A child from Chaumuha block needed some prodding for writing. He told the investigator,

"सिर्फ अपना नाम लिखना आता है।"

But on being given the response sheet, this is what he wrote,

अजीत मला

वयल तम्लि तम्लि

मथुहाँ कक्षल पम्नि

The child's approximations of the familiar words are close to the conventional words. He was able to get most of the constituent sounds in these words. His knowledge of *matras* was limited and its use was random and erratic. He was able to recognize two letters correctly, rest were guesses. His reading of the familiar story was time-taking and unsure, but he did not give up till he was asked to stop. He exhibited 'wordness' in his reading, because at places, he blended the sounds to make words, even though these were non-sense words at times. He named three poems when asked about stories he has read. He got to hear stories both at home and at school.

Case 6

A child from Govardhan block wrote the following on the data sheet:

हासिम

He recognized letter ∕र∕ out of the five letters. When asked to read the familiar story, he created a text from memory which was very close to the original story in content. He only said लोमडी और कछुआ in response to reading of the unfamiliar text. He took that cue from the pictures. He could name a few stories he had heard/read and said that his teacher told stories to him at school.

This child had formed some concepts about reading and writing, even though these could be considered grossly inadequate for a grade III child. His strengths were that he could find illustrations a useful resource to deal with text as he was unable to read. He had some rudimentary concept about words indicated by his use of *shirorekha* in two words. His letter knowledge was limited. He needed help on many fronts, but it is important to acknowledge what he knew and made a start from there.

Case 7

A child from Raya block was unable to write his name in response to any of the tasks of the tool. He could not name any story or poem, not even his textbook and had shared that nobody told him stories at school or at home. He refused to read the stories. This is the other extreme of the continuum of reading and writing.

4.2.3 Effectiveness of pedagogic practices adopted in schools

The section presents a theme wise analysis of the reading and writing behaviours of the children observed during end-term survey. These behaviours are reflective of the pedagogic interventions made in Mathura project schools. Each theme described here in this section is illustrative of the impact of nuanced understanding of the pedagogy that the teachers were introduced to during training programmes. For example, if a child is constantly judged and teachers all the time pointed out their mistakes, this would result in lack of confidence in the child resulting in avoiding to read. This could actually bar a child from attempting to pick up an unfamiliar text to a stranger in a test like situation as was the case of end-term survey. Thus risk taking behavior discussed below can be considered as one of the measures for the effectiveness of the pedagogy employed. Similarly, familiarities with conventions of print, story grammar etc. are such other themes that present an overview of a certain kind of pedagogic practices and its efficacies as a result.

4.2.3 (a) Risk -Taking Behaviour

Risk - takers in this context are children who were not conventional readers and writers but they attempt to read and write. They attempted to write using invented spellings, while reading they use various strategies for predicting the text. For example, a child who was not a conventional writer tried to write her village name and also attempted to provide answer in a complete sentence, using invented spelling. She writes 'म ज र ल या ग म र त ह' for मैं जरलिया गाँव में रहती हूँ। Though she has not applied conventions of prints like space between two words and had also not used *matras* but was able to convey that 'she lives in Jaralia village'. It also reveals that the child's use of letters is corresponding to the sound like प प न for पीपनी and क ज ल for काजल which indicates close approximation. This kind of 'risk taking' in writing is only possible when children are given opportunities for meaningful writing, which is the thrust of the Early Literacy Programme. There were many children like her who survived a risk taking behavior in writing, used invented spellings with confidence, tried to write in sentences, which conveys positive and confident attitudes towards writing.

Findings
- Children were taking risks in reading and writing. Risk - takers were children who are not conventional readers and writers but who attempted to read and write. They attempted to write using invented spellings and read using various cues. This kind of 'risk taking' is only possible when children are given opportunities for meaningful reading and writing, which has been the thrust of Mathura pilot project.

- In reading, even though the children were not conventional readers and were aware of it, still they attempted to read using a repertoire of strategies. Risk taking behaviors included taking cues from pictures and context, support of spoken language and blending of letters and asking the adult/ teacher for help where children were faced with a challenge. It showed that the child wants to overcome this problem and move ahead in reading. Moreover, it also shows that the child is aware about where to look for solutions.

- In writing, children used invented spelling with confidence, tried to write in sentences which conveys positive and confident attitudes towards writing.

Likewise, children showed risk taking behavior in reading. Though 'blending of letters' has also been observed as one of the strategies which children used despite the fact that this practice was discouraged in the ongoing programme. One of the reasons for its occurrence could be because it is so deep rooted in our practice and is considered to be the only strategy for teaching of reading. Two, it occurs with other risk taking behaviors like taking cues from pictures and context, support of spoken language and asking the investigator for help where child faces a challenge. It shows that the child wants to overcome this problem and move ahead in reading. Moreover, it also shows that child is aware about where to look for solutions.

4.2.3 (b) Familiarity with conventions of reading and writing: Concepts about print

All children showed familiarity with few or most dimensions of conventions of reading and writing. These conventions range from knowing how to hold printed text or material in the correct way to identifying letters of the alphabet to creating the unit of word by putting a line on top of a cluster of letters (in Hindi) and several others.

- **How was the print material held and read?**

It may seem strange to discuss how the paper (text of familiar and unfamiliar story) was held. The field observation made during the base line data revealed that there were children who were unsure about holding the paper/book given to them for reading. This is not unusual for children being taught in book-starved, poorly resourced schools and home environment. Opportunities to read and write were rare and largely revolved around one textbook and confined to copying of letters. However, during the end-term survey, children knew the 'right way' to hold the stories and all children without exception knew that print in Hindi is read from top to bottom and left to right. Despite this knowledge about directionality of print, we came across the children who did not start their reading from the first line of the story but from lines below it.

- **Pauses and Stops: Use of punctuation marks**

In the end-term survey, children showed their awareness of the presence or use of punctuation marks during reading and writing. Children paused appropriately during reading for a comma or a period. In the writing section, there were children, who ended the sentences on their name and the name of their village with a *purnaviram* (period). For example a child from Govardhan block wrote her name and her village name as follows:-

मेरा नाम साक्षी है।

मेरे गाँव का नाम ड़ाढी है।

- **Recognition of letters**

There were children who could name the letters of the *varnmala* promptly. There were also children who were unable to recognize the letters. The ones who were not able to recognize often confused the letters with other letters. This has also been discussed in the quantitative analysis.

For example a child from Chaumuha block identified:

थ as ल लट्टू

ज as च चमकी

प as छ छतरी

- **Understanding of word and sentence structure**

Children displayed understanding of concepts about word and sentence. They recognized words as units when they segmented and blended the constituent letters of a word while reading. They seemed to know that a word is one entity indicated by the *shirorekha* and that there is space before and after the word. Though, this cannot be said about children whose reading was focused only on letter and *matra* recognition and there was no blending of letters. Of course, children who could read fluently had a well-developed concept of words. In writing, most children wrote the letters of a word closer together and further indicated the unity of those letters by putting a *shirorekha* on top of the letters. Furthermore, each word was followed by space before they wrote the next word of the sentence. A child from Govardhan block wrote:

मोर नाम नसुल है

में तासीय गाँव में राता है

The writing of this child cannot be called completely conventional but his spellings are closely approximate to the conventional or standard spellings. He has a well-developed concept of word and of sentence structure to a large extent, even though his sentence does not end with a *purnaviram*.

A child from Raya block wrote the following on the data sheet:

मेरा नाम शिवानी है ।

In her case, her spellings are perfect and her concept of word is developing.

Findings

- Children surveyed in the end-term were aware about the conventions and directionality of print as compared to the observations in the base-line survey.

- Children knew the 'right way' to hold the books and all children without exception knew that print in Hindi is read from top to bottom and left to right.

- Children showed their awareness of the presence or use of punctuation marks during reading and writing.

- Well-developed concept of word and of sentence structure was found to be observed.

4.2.3 (c) Familiarity with Story Structure

Children who could read the stories, even though with support from the pictures, primarily showed a certain set of expectations or assumptions about the text. Children expected the text to be meaningful and whole story or a whole poem. They did not seem to consider the text of the familiar or unfamiliar story as a string of disconnected words or a bunch of disjoint lines. They were observed to have a

sense of story, even though it deviated from the printed story, which was constructed around a central idea and had its own narrative. They negotiated the stories in different ways and picked their cues either from the illustrations given along with the stories or with recognition or decoding of a key word in the text. Once this was done, the text seemed accessible to the child and the narrative unfolded. A few examples have been discussed to illustrate this better:

A child from Govardhan block reproduced the following narrative on seeing the illustration on page 1 of the familiar story.
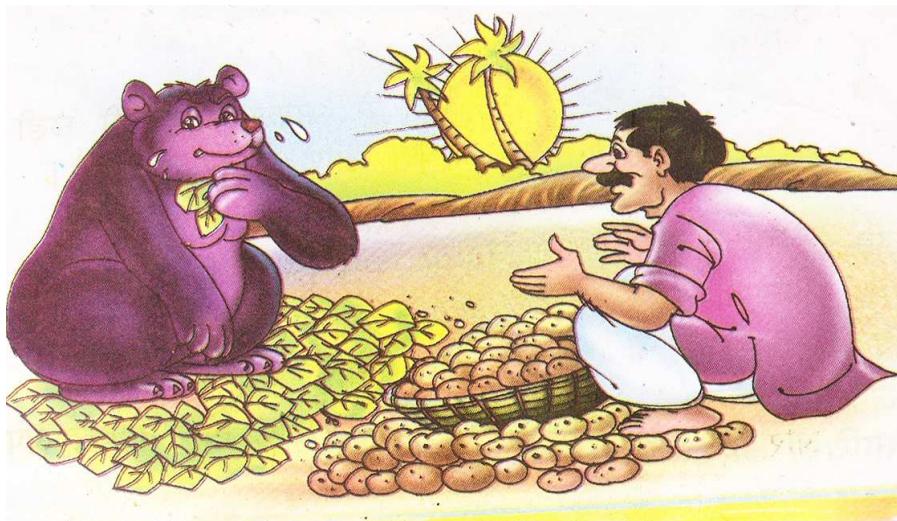
किसान की होशियारी

"भालू बोला मुझे आलू चाहिए। आदमी बोला तू मुझको जड़ दे इतनी हिम्मद जवा तो तू सीदा सा अब तू हरामी मैं जब भी सूदा नही तब भी मैं लड़ भिड़ अब तुझको जड़ई देकर रहूँगा मैं। भालू बोला मैं पालक ले सकता हूँ क्या तुझको मैं दो तीन पालक छोड़कर जाऊँगा। तू पालक का क्या करेगा भालू बोला मैं इसको बेकूंगा।"

It seems that the child had re-constructed this narrative from memory. This particular story was taken from the grade II textbook of Hindi. पालक or spinach is not a part of the original story and was added by the child. But the child was able to recollect that the central narrative of the story revolves around negotiation between a bear and a man for roots or shoots of the crop. The core of the story was maintained in the narrative produced by the child.

Another child recited the poem भालू आया, भालू आया when asked to read the text. Apparently, the illustration of the bear was the cue. The child seemed to have this assumption that a text given with the picture of a bear should have content on bear(s). It is a reasonable assumption for a child who had had the opportunity to look at books. It is that texts are whole and carry meaning. Even though, this child did not try to access the print through the conventional route of letters and their sounds, he knew it is meaningful.

Many children were able to respond to the comprehension questions even if their reading of the story was challenging. The nature of reading strategies they displayed during reading did not seem promising for comprehension, but their answers to the questions revealed that they were following

the narrative. It is worth noting here that story structure acts as a scaffold for comprehension while reading a story. The concept they had about the structure of a story guides them in predicting and anticipating the events in the story. This further supports the reading of print and recognition of words.

4.2.3 (d) Attempts at writing: use of invented spellings

Most children attempted to write the words asked under category of familiar words. The three words मथुरा, काजल* and पीपनी appeared in their conventional form and spelling and several variations.

For instance, the ranges of variations for the word मथुरा are follows:

मथुरा मथूरा मथुर मथरा मतरा मधरा मतर माथुर मथुता

All the variations mentioned above are good approximations of the conventional spelling. Similarly, काजल was a fairly common attempt at writing the word काजल. The analysis of Children's writing in the collected data indicates that *matras* pose a challenge for many children. (The reasons behind this struggle with *matras* could be because of the manner in which *matras* are being taught to children in spite of interventions from the project.)

An illustrative example of this is the following sentence by a child from Farah block:

मरा गक न म क नम हा

In the first glance, this writing seems nowhere close to the way it should have been written, which is:

मेरा गाँव का नाम महुअन है।

But, a closer look reveals that the child had captured mostly all the consonant sounds in the words minus the *matras*.

Another instance of a similar but a much closer attempt at writing by a child from Naujheel block:

मेजरैलीया गाऔ मेरेता हुं

This writing makes deviations from the conventional form more in terms of carrying reflection of the spoken language. The word गऔ for गाँव and रेता for रहता could be analyzed in this way.

(e) Taking cues from the environment for writing

It was observed during the survey that children took help from the print available in their immediate environment to write their name and the name of their village. Children were not only aware of the print in their environment but are also intelligently using it in their writing.

_____

* Kajal is the name of a character in the *Barkha* series and Pipni appeared as one of the titles of the book f in the *Barkha* series. An active use of the *Barkha* series was encouraged in the classrooms.

An example of this would be how a child from Raya block used the print on the response sheet. When he was writing the name of his village, he wrote 'मे सारस'. He paused for a few seconds and then taking cue from the word 'गाँव' printed on the response sheet copied गाँव and completed his sentence.

मे सारस गाँव में रहता हू।

A similar example is that of a child from Chaumuha block wherein he used the words 'नाम' and 'गाँव का नाम' printed on the data sheet to write

नाम अन्जू है

गाँव का नाम तापातुा है ।

Another interesting example of use of print is that of a child from Govardhan block who used the printed word 'नाम' on the response sheet to incorporate it in his own sentence and formed sentence by writing on both sides of the printed word 'नाम'.

मेरा **नाम** हरीश शर्मा है

One child copied the name of her school and village written on the wall of the school to write the name of her village on the response sheet.

पी.मी. पाथमिक वनजा

She pointed to वनजा after writing it from the wall to stress that this is the name of her village. Here, the child did not copy as painted on the wall but her attempt showed that she was aware of what those words on the wall meant and made an attempt to use it to support her writing.

In all these cases, it is interesting to note that children are readily using cues available to them

> **Findings**
>
> - Children had a sense of the story structure. They understood it as a whole and not a set of disjointed words or lines. They had a sense of a story and negotiated it in different ways using various reading strategies.
>
> - Story structure acts as a scaffold for comprehension while reading a story. The concept children had about the structure of a story guided them in predicting and anticipating the events in the story. This further supports the reading of print and recognition of words.
>
> - Children were found to be help from the print available in their immediate environment in their writing. Children were not only aware of the print in their environment but were also intelligently using it in their writing. This indicates that these children expected print material to be meaningful and purposeful.

and selecting the cues they wanted to use. This indicates that these children expect print to be meaningful and purposeful. The name of the school was painted with the purpose of labeling it, (a very common use of print in the contemporary world) for identification. This child is aware of this function of print and can use it to her advantage. An uninformed interpretation of the support child

sought from environmental print is that the child 'cheated.' From the developmental point of view, one would call this **strategic reading and writing with intelligent use of multiple cues.** It is very important for an early reader and writer to know the sources and cues which can guide and support her reading and writing. These children seemed to be aware of this.

4.2.3   (f) Some Common Reading Behaviours

There were few reading behaviors which were found to be quite common amongst the children in the survey.

For instance, most children identified letter in the first section of the tool. A large number of these children named letters in a particular way. After naming the letter, they followed it up with a name of an object which also had the same letter name/sound in its beginning. So, when a child identified five letters given in the data sheet in a row it sounded like this.

थ   थन

र   रथ

ज   जलेबी/जग

प   पतंग/पत्ता

क   कलम/कबूतर

Interestingly, the objects that were named for each letter were mostly the same, even across the five blocks. Such naming of objects with the letter name seemed inextricably related, as if the sound of the letters did not have an independent identity or the letter has an association only with the object related to it. The Early Literacy Programme tried to discourage this kind of reading practice because of the fixed association it formed in the child's mind.

This 'strategy' continued to be used by a few children while reading the story. For example, the word भालू was read something like this:

भ भट्टी, आ की मात्रा, ल लट्टू, ऊ की मात्रा भालू

These children were asked to stop reading after the first page of the story because they were evidently not reading for meaning but were struggling to identify letters and *matras* in each word.

A similar way of reading i.e. decoding was used by children. The decoding involved segmentation of the word and blending of the segments. But, the names of objects had dropped off. So, the word भालू in किसान की होयशयारी was read like this:

भ आ ल ऊ भालू

There were children who segmented the word, but the *matras* remained blended in the preceding letter. For example:

कि सा न किसान

This was seen the most common way of reading.

Another interesting behaviour exhibited by children was observed when they encountered any difficulty in reading. Children, who were not tracing the text with their finger while reading, brought their finger to print and pointed at each letter and *matras* while decoding the difficult word. It seems they were aware that they had run into a challenging portion of the text and they need to give more attention to what they were reading. The tracing of the print with finger was a manifestation of a focused mind. It **was a way of monitoring their reading- a meta-cognitive act**.

4.2.3 (g)Peculiar Reading Writing Behaviours

This section discusses few such cases of young readers and writers who used rather strange ways to read and write. These are just a handful of children, but their behaviours were found interesting and set us thinking.

A child used the common reading strategy of decoding. What was unusual about his reading was that his reading was accompanied with sudden jerks of the head and movement of his hand. These jerks were meant to indicate the *matras* – the vowel sounds in Hindi. An elongated vowel like ऊ (oo) as in भालू was indicated by a rising intonation and an upward movement of the forefinger. A short vowel like इ (i) as in किसान was accompanied by a downward movement of the forefinger. This child read the entire text in this manner!

A child from Chaumuha was pointed to the up-turned (blank side of sheet facing us) reading material kept on the table and was asked to read it. The side of the paper facing up was a blank sheet and the print was on the other side. The child held up the paper to light and started to read from the shadow of the text on the other side of the paper. The child used the conventional direction of left to right even though the direction of the shadow of the text was from right to left. The child continued to identify mirror images of letters till he was asked to turn the page and read.

4.3 Conclusion

Children are taking risks in reading and writing. **Children' repertoire of strategies had increased** and it included taking cues from pictures and context, support of spoken language and blending of letters. They attempt to write using invented spellings. This kind of 'risk taking' is only possible when children are given opportunities for meaningful reading and writing, which has been the thrust of Mathura pilot project.

Children were **aware about the conventions and directionality of print** as compared to the observations in the base line survey. Children knew the 'right way' to hold the books and all children knew that print in Hindi is read from top to bottom and left to right. Children showed their awareness

of the presence or use of punctuation marks during reading and writing. Well-developed concept of word and sentence structure was observed.

Print rich environment in the classroom, reading corners, story-telling by the teacher, children's engagement with print had supported children in their process of comprehension of the text. Children had a sense of the story structure. They understood it as a whole and not a set of disjointed words or lines. The concept children had about the structure of a story guided them in predicting and anticipating the events in the story.

When children read with comprehension, they are aware when their meaning making process gets affected. **When children realize what they read is not coherent with meaning being constructed, they make self corrections.** Children who were reading solely on the basis of letter recognition and blending of letters did not make self corrections.

In writing, children used invented spelling with confidence, tried to write in sentences which definitely conveys **positive and confident attitudes towards writing**. The case studies show that children were readily using cues available to them and selecting the cues they wanted to use. This indicates that children expected print to be meaningful and purposeful. It is very important for an early reader and writer to know the sources and cues which could guide and support her reading and writing. These children seemed to be aware of this.

Although these were the major shifts in children's ways of approaching reading and writing and developing as literacy learners as compared to the base-line survey where children were not willing to even attempt to read and of those who read, only 3% comprehended. Even in writing one fourth of the children during base-line didn't write their names, whereas now in the end-term survey, children are developing print conventions and are attempting to write using invented spellings. These have been some of the significant changes captured in end-term survey as compared to the base-line and yet, there were some changes not so significant. The study was exploratory in nature and was amined at understanding processes of language development in the classrooms. The main findings that can be drawn from the is that creating print rich environment and the presence of relevant and age-appropriate children's literature, graded reading series played a major role in bringing these results as were given in great detail in this section earlier. This change in the classroom was also a result of the continual dialogue with the teachers over the orientation programmes and monitoring which helped them bring about the change in their pedagogical practices.

Section: 4

Key Finding and Recommendations

SECTION 5

Key Findings and Recommendations

5.1 Key Findings

The End-term survey of the Mathura Pilot Project has revealed various aspects about the process of reading and writing in the early years of schooling.

The analysis and findings highlight the following points:

- It is important to understand the major dimensions through which children's reading and writing skills are developed rather than slotting them into categories of readers and writers or non-readers and non-writers.

- Each child is on the path of development and their development should be supported by informed pedagogic practices, conducive classroom environment and other factors like opportunities to engage with print and reading and writing in general. These aspects need to be addressed during teaching learning process.

- Children's exposure to a print- rich environment is imperative in enhancing their reading skills. Children should be given ample opportunities to engage with print material. This understanding among practitioners needs to be developed.

- Children essentially look for meaning when they read. Use of cues from context, pictures, background knowledge reveals how children use these cues to make meaning. These are the parts and process of learning reading. It indicates that children expect print material to be meaningful and purposeful and employ reading strategies for the same.

- Prediction is a developmental phase of the reading process and its acknowledgement in the classroom supports children's reading process and leads to successful comprehension of the texts.

- Children's rich exposure to literature increases their repertoire of employing strategies to read a text and an attempt to pick up an unfamiliar text with confidence.

- Children's self-correction in their reading is indicative of their meaning construction. It is a way of monitoring their reading and it is a meta-cognitive act.

- Children's writing is a reflection of their engagement with print. Children were not only aware of the print in their environment but also intelligently use it in their writing.

- Children's risk-taking behaviours in reading and writing convey their positive and confident attitudes towards literacy.

- Changes in children's reading and writing behaviours determine the pedagogical changes in the classroom. It is indicative of the changes that have emerged in teachers' understanding of early literacy which has reflected in the classroom instruction and eventually in children's reading and writing behaviours.

Teachers were not interacted with as a part of this survey. But time to time discussion, monitoring reports and focus group discussion revealed a progressive leap in their understanding. Some important aspects observed in teachers understanding are:

- Teachers understood that 'Reading' is not decoding but reading is 'reading with comprehension'. Teachers now view listening, speaking, reading and writing as integrated processes. They are now viewing writing as a meaningful and purposeful activity rather than a mechanical process.

- Teachers have become aware of the importance of children's literature as a meaningful and effective resource of learning to read. Teachers now acknowledge the developmental phases of reading and writing as they emerge in the classroom and joyfully accept children using their home language in school. Classrooms have become lively with the presence of books and children's literature.

- Classroom activities of reading and writing connect with personal experiences of the children. The teachers now readily reach out to students and qualitative talks have become a regular feature between them.

5.2 Recommendations

- A National Resource Group on early literacy needs to be formed that creates a platform for discussions and debates on existing practices and reforms in the area. This group should comprise of educationists, early literacy experts and planners and will be responsible for providing support to states in designing their language programmes.

- States/UTs need to form its own resource group on early literacy. This group should comprise of academic authority of the state, educationists, early literacy experts, children's literature experts, teachers and teacher educators who can guide and support the state in its language programmes in aspects curriculum development, material development for teachers and children and capacity building of teachers.

- The pedagogical practices should focus on reading for comprehension and writing with meaning and should be supported by meaningful print rich environment in schools. The importance of literacy learning in the foundations years of schooling needs to be taken with seriousness as it impacts learning and all other curricular areas.

- The academic authorities of States/UTs should ensure that the early grades language programmes should be carefully designed and its linkage to progressing grades should also be well defined.

- The onus of the literacy programme should be shared with the people involved at State, District and Block and cluster levels to ensure support and long term sustainability. Professional development of teachers, head teachers, Cluster and Block Resource teams is imperative to develop a sound understanding about the theoretical concepts of early literacy.

- It is desirable that States/UTs ensure that at the school, teachers are available as per the Pupil Teacher Ratio (PTR) prescribed by RTE-2009. The school should assign teacher(s) for grades I and II specifically.

- Every States/UT should plan professional development of practitioners on a long-term basis. To ensure that children would become independent readers and writers, teachers need to be empowered with sound theoretical understanding of concepts and processes of learning to read and write. Professional development programmes apart from training could also include monthly review meetings, teacher seminars, visit to model schools and others.

- Pre-service teacher training programmes should include core area on early literacy and children's literature in their curriculum. All subject teachers should graduate with an understanding of literacy development of children to understand and support literacy learning processes of children, which every teacher encounters, irrespective of the subject they teach.

- In-service teacher training programmes should focus on all components of early literacy to develop conceptual understanding of the processes of reading and writing amongst primary school teachers. The trainings should be spread over a considerable time-frame to allow teachers to delve into the intricacies of the processes involved. Since there teachers have their own

- experiences from their classrooms, this should be used in the training to understand the process of literacy development.

- Material developed for student-teachers or teachers, should address the curricular needs of an early literacy programme. Teachers graduating out of professional development programmes should be empowered and equipped to address the literacy related needs of children coming to their schools.

- States should ensure that school environments are conducive to literacy learning. Reading corners should be created in all classrooms of children in grades classes I and II so that literature and reading material is easily accessible for children. School libraries should be functional. The school library should be a hub of all academic activities in school and resource centre for children and teachers both. The librarians/ in-charge should also be actively involved in academic activities of the school and teachers. They should all work in close cooperation to be able to gude and support each other.

- Children's literature is an essential component of reading corners and libraries in schools. States/UTs and union territories should ensure that relevant and age-appropriate literature is available to children in schools. States should develop clear guidelines for selection of good children's literature. This should be widely disseminated among teachers.

- States should ensure the alignment between pedadgogical practices in the classroom, textbooks and assessment procedures. The academic authority of the States/ UTs should ensure that the textbook aligns with the designed curriculum for schools.

- States/UTs should plan activities to create awareness in communities/SMC on the importance of early literacy. Activities like **pustak mela**, book week, **nukkad natak**, story festivals, mobile libraries are some suggested activities to create awareness among various members of the community.

- Monitoring needs to be an inbuilt part of early literacy programme implementation. Monitoring demands academic support and hand-holding of teachers, therefore, the people involved in the monitoring process, i.e. the Block and Cluster Coordinators, Head Teachers should have an understanding of the vision as well as the academic principles and classroom implementations. Follow-up, academic and administrative hand-holding is imperative for the long-term sustainability of the programme and should be a continuous process.

- Researches in the area of early literacy should be encouraged to expand the knowledge base in the country and create platforms for curricular discussions and debates on early literacy.

References

Anderson.R.C..Hiebert.E.H..Scott.J.A.. & Wilkinson. I.A.G. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: The National Institute of Education, U.S. Department of Education.

Calkins, L. (1994). *The art of teaching writing*. Portsmouth, NH: Irwin Publishing.

Clay, Marie.M(1991). *Becoming Literate, the construction of inner control*, Auckland, Heinemann.

Cooper. J.D. (2000). *Literacy: Helping children construct meaning* (2nd ed.). Houghton Mifflin Company. Prinston, New Jersey.

Sinha, S. (2001). *Emergent Literacy: An Alternative Approach*. in Issues in Primary Education. Vol. III No. 1 Jan- March.

Ferriero, E., & Teberosky, A. (1982). *Literacy before schooling*. Portsmouth, NH: Heinemann.

Goodman, K. (1967). *Reading: A Psycholinguistic Guessing Game*. Journal of the Reading Specialist, May, 126-135.

Graves, D. (1983). *Writing: Teachers and children at work*. Portsmouth, New Hampshire: Heinemann Educational Books.

Kumar, K. (2000). *The Child's Language and the Teacher*. National Book Trust, New Delhi

Kumar, K. (2004). *What is Worth Teaching*. (3rd ed.) Orient Longman Pvt. Ltd.

Mason,J., Sinha,S., (1992). *Emerging literacy in the early childhood years: Applying a Vygotskian model of learning and development*. University of Illinois at Urbana-Champaign.

National Curriculum framework (2005). National Council of Education Research and Training, New Delhi.

Padhne ki Samajh, (Nov, 2008). National Council of Education Research and Training, New Delhi.

Padhne Sikhane ki Shuruaat, (July, 2008). National Council of Education Research and Training, New Delhi.

Padhne ki Dehleej Par, (July, 2008). National Council of Education Research and Training, New Delhi.

Reading for Meaning, (Nov, 2008). National Council of Education Research and Training, New Delhi.

Sinha, S. (2000). *Acquiring Literacy in Schools*. Redesigning Curricula in journal Seminar. # 493, New Delhi.

Smith, F. (2004). *The Identification of Meaning*. Understanding Reading : A psycholinguistic analysis of reading and learning to read. (6th ed.) Routledge UK

Teale, W. H., & Sulzby, E. (1989). *Emergent literacy: New perspectives*. In D. S. Strickland & L.M.Morrow (Eds.), Emerging literacy: Young children learn to read and write . Newark, DE: International Reading Association.

Appendix- A

मथुरा के स्कूलों में तीसरी कक्षा में पढ़ने वाले विद्यार्थी कैसे पढ़ते हैं, इसको समझने के लिए यह सरल सी परीक्षण सामग्री बनाई गई है।

निर्देश

- स्कूलों में जाने से पहले इस परीक्षण-साम्रगी को आप 4-5 बार पढ़ लें। यह आवश्यक है कि आप सही क्रम और निर्देशों से परिचित हों।

- निम्नलिखित जानकारी आपको बच्चे से बातचीत के आरंभ में डेटा शीट्स में दी गई जगह पर लिखनी है।

    1. स्कूल का कोड

    2. बच्चे की उम्र

    3. तिथि

- **पहला भाग**

    1. बच्चे से उसका नाम और गाँव का नाम वाक्यों में लिखवाएँ।

    2. कुछ परिचित शब्द लिखवाएँ।

    3. शब्दों में आए कुछ अक्षरों को भी बच्चे से पहचानने के लिए कहें।

- **दूसरा भाग**

    बच्चे से दो कहानियाँ पढ़वानी हैं। पहली कहानी 'किसान की होशियारी' कक्षा II की पाठ्यपुस्तक 'कलरव' से ली गई है। दूसरी कहानी 'दोस्त की मदद है।'

    1. बच्चे से दोनों कहानियाँ पढ़वानी हैं। स्वयं नहीं पढ़नी हैं।

    2. बच्चा जिस भी तरीके से पढ़े, उसी आधार पर दोनों कहानियाँ के लिए अलग-अलग चैकलिस्ट 2(a) और 3(a) भरनी है।

    3. चैकलिस्ट भरने के बाद, उस पर यदि आपकी कोई टिप्पणी हो तो उसे दी गई जगह में लिखें।

- **तीसरे और चौथे भाग** में बच्चे से पढ़ने के लिए कहना है एवं बाल साहित्य के बारे में कुछ प्रश्न पूछने हैं।

    1. बच्चे से प्रश्न सीधे तरीके से पूछने हैं, घुमा फिराकर नहीं।

    2. बच्चे से उसके पठन के बारे में कोई टिप्पणी नहीं करनी है।

- **नोट**

    1. चारों भागों के लिए विस्तृत निर्देश आगे के पन्ने पर दिए गए हैं। निर्देशों को ध्यान से पढ़ें और बताए गए क्रम में ही बढ़ें। अपनी ओर से कोई भी फेर-बदल ना करें।

    2. बच्चे से उत्तर प्राप्त करने के लिए किसी प्रकार की सहायता नहीं करनी है।

1 (a)
परिचित प्रिंट

स्कूल कोड :　　　　　　　　　　　　　　　　　तारीख :

लड़का/लड़की :　　　　　　　　　　　　　　　　उम्र :

I. नाम

1. बच्चे से उसका नाम पूछें।
2. बच्चे से यह वाक्य लिखने को कहें – मेरा नाम .... है।
3. अगर बच्चा वाक्य नहीं लिख पाता तो केवल नाम लिखने के लिए कहें।
4. अगर बच्चा वाक्य नहीं लिख पाता तो आप लिख दें और बच्चे से पढ़ने को कहें।
5. फिर नाम में आए सभी अक्षर पहचानने को कहें।
6. जो अक्षर बच्चा नहीं पहचान पाता उन अक्षरों को दिए गए बॉक्स में नोट कर लें।

II. गाँव का नाम

1. बच्चे से उसके गाँव का नाम पूछें।
2. बच्चे से यह वाक्य लिखने को कहें – मैं .... गाँव में रहता/रहती हूँ।
3. अगर बच्चा वाक्य नहीं लिख पाता तो केवल गाँव का नाम लिखने के लिए कहें।
4. अगर बच्चा वाक्य नहीं लिख पाता तो आप गाँव का नाम लिख दें और बच्चे से पढ़ने को कहें।
5. फिर गाँव के नाम में आए सभी अक्षर पहचानने के लिए कहें।
6. जो अक्षर बच्चा नहीं पहचान पाता उन अक्षरों को दिए गए बॉक्स में नोट कर लें।

III. परिचित शब्द

1. उसके बाद बच्चे से 'मथुरा', 'काजल' और 'पीपनी' शब्द लिखने के लिए कहें।
2. अगर बच्चा बिल्कुल नहीं लिख पाता है तो आप ये तीनों शब्द लिख दें और उससे एक-एक शब्द पढ़ने को कहें।
3. एक-एक कर के हर एक अक्षर के नीचे अँगुली रखकर अक्षर पहचानने के लिए कहें।
थ, र, ज, न, क
4. बच्चा जो अक्षर सही पहचानने उस अक्षर के आगे बने चौकोर खाने पर सही का निशान लगाएँ। और जो अक्षर न पहचानने उस पर कोई निशान न लगाएँ।

1 (b)
परिचित प्रिंट (बच्चे से इस पन्ने पर लिखवाएँ)

स्कूल कोड :   तारीख :

लड़का/लड़की :   उम्र :

---

1 नाम

2. गाँव का नाम

3. परिचित शब्द

थ	र	ज	न	क

नोट : इस पन्ने पर लिख दें कि अगर आपको बच्चे का या गाँव का नाम लिखना पड़ा तो उस लिखे हुए को बच्चे ने पहचाना कि नहीं।

टिप्पणी :

2 (a)
परिचित कहानी- चैकलिस्ट
(किसान की होशियारी)

स्कूल कोड :   तारीख :

लड़का/लड़की :   उम्र :

1. बच्चा पढ़ने से इन्कार कर देता है।   हाँ   नहीं

2. पठन सामग्री को सीधे नहीं पकड़ता है।   हाँ   नहीं

3. पढ़ते वक्त अँगुली पन्ने पर बाएँ से दाएँ फेरता है।   हाँ   नहीं

4. पठन सामग्री के बारे में अंदाज़ से कुछ बताता है।   हाँ   नहीं

5. एक पृष्ठ पढ़ लेने पर पन्ना खुद पलटता है।   हाँ   नहीं

टिप्पणियाँ :

2 (b)
परिचित कहानी (किसान की होशियारी)
कहानी पर आधारित प्रश्न

_____

स्कूल कोड :   तारीख :

लड़का/लड़की :   उम्र :

_____

कहानी पर आधारित प्रश्न

ये प्रश्न केवल तब पूछने हैं जब बच्चा पूरी कहानी पढ़ ले।

1. नीचे वाला हिस्सा लेने के लिए किसान और क्या बो सकता था?

2. क्या किसान होशियार था? क्यों?

3. भालू दोनों बार किसान से चिढ़ गया?

4. एक-एक शब्द नीचे अँगुली रखकर बच्चे से नीचे दिए गए शब्द पढ़ने को कहें। अगर बच्चा पढ़ ले तो शब्द के सामने दिए गए बॉक्स पर सही निशान लगा दें। अगर बच्चा ना पहचाने तो कोई निशान न लगाएँ।

ज़मीन ☐

फसल ☐

ऊपर ☐

किसान ☐

भालू ☐

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3 (a)

अपरिचित कहानी- चैकलिस्ट
(दोस्त की मदद)

स्कूल कोड :   तारीख :

लड़का/लड़की :   उम्र :

---

1. बच्चा पढ़ने से इन्कार कर देता है।   हाँ   नहीं

2. पठन सामग्री को सीधे नहीं पकड़ता है।   हाँ   नहीं

3. पढ़ते वक्त अँगुली पन्ने पर बाएँ से दाएँ फेरता है।   हाँ   नहीं

4. पठन सामग्री के बारे में अंदाज़ से कुछ बताता है।   हाँ   नहीं

5. एक पृष्ठ पढ़ लेने पर पन्ना खुद पलटता है।   हाँ   नहीं

टिप्पणियाँ :

3 (b)
परिचित कहानी (दोस्त की मदद)
कहानी पर आधारित प्रश्न

स्कूल कोड :   तारीख :

लड़का/लड़की :   उम्र :

कहानी पर आधारित प्रश्न

ये प्रश्न केवल तब पूछने हैं जब बच्चा पूरी कहानी पढ़ ले।

1. कछुए को बचाने के लिए लोमड़ी ने क्या तरकीब सोची?

2. क्या तेंदुए ने कछुए को खा लिया होगा?

3. कहानी में दोस्त कौन थे?

4. एक-एक शब्द नीचे अँगुली रखकर बच्चे से नीचे दिए गए शब्द पढ़ने को कहें। अगर बच्चा पढ़ ले तो शब्द के सामने दिए गए बॉक्स पर सही निशान लगा दें। अगर बच्चा ना पहचाने तो कोई निशान न लगाएँ।

कछुआ

तालाब

छलाँग

लोमड़ी

तेंदुआ

4 (a)

(बच्चे के पढ़ने पर प्रश्न)

स्कूल कोड :   तारीख :

लड़का/लड़की :   उम्र :

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1. (क) क्या तुम्हें कोई घर या स्कूल में कहानी सुनाता है?

   (ख) कौन-कौन सुनाता है?

2. क्या तुम्हारे पास कोई कहानी की किताब है?

3. तुम्हें कौन-सी कहानी सबसे ज़्यादा पसंद है?

4. (क) क्या तुम्हारे घर में अख़बार आता है?

   (ख) अख़बार कौन-कौन पढ़ता है?

4 (b)
(बच्चे से 'बाल साहित्य' पर प्रश्न)

स्कूल कोड: तारीख:

लड़का/लड़की:   उम्र:

1. तुमने कौन-कौन सी कहानियाँ सुनी हैं?

2. तुम्हें कौन-सी कहानी सबसे अच्छी लगती है? क्यों?

3. स्कूल में तुम्हें कौन कहानी सुनाता है?

4. क्या तुम घर जाकर किसी को कहानी सुनाते हो? किसे?

5. तुमने कौन-कौन सी कहानियाँ सुनाई हैं?

किसान की होशियारी

एक किसान अपना खेत जोत रहा था, अचानक कहीं से भालू आ गया।

भालू किसान को मारने झपटा। किसान ने कहा, ''मुझे क्यों मारते हो? फसल आने दो, जो कहोगे वही खिलाऊँगा।''
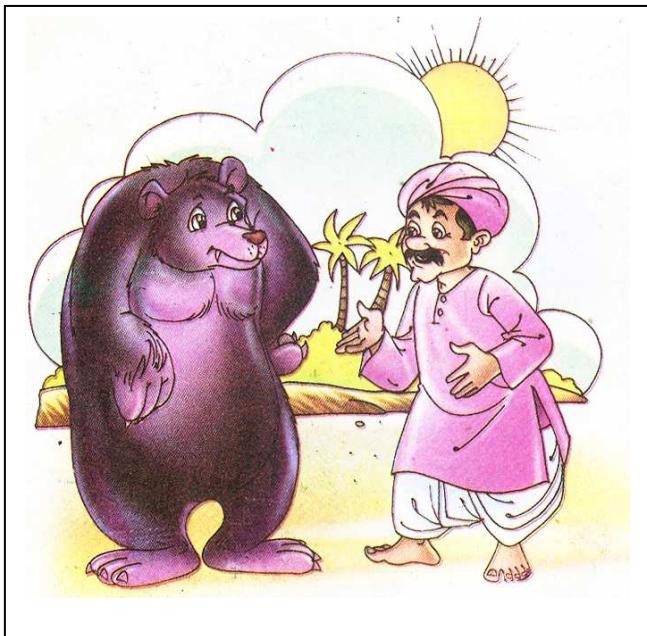
भालू ने कहा, ''ज़मीन के ऊपर की फसल मेरी और नीचे की तुम्हारी रहेगी।''
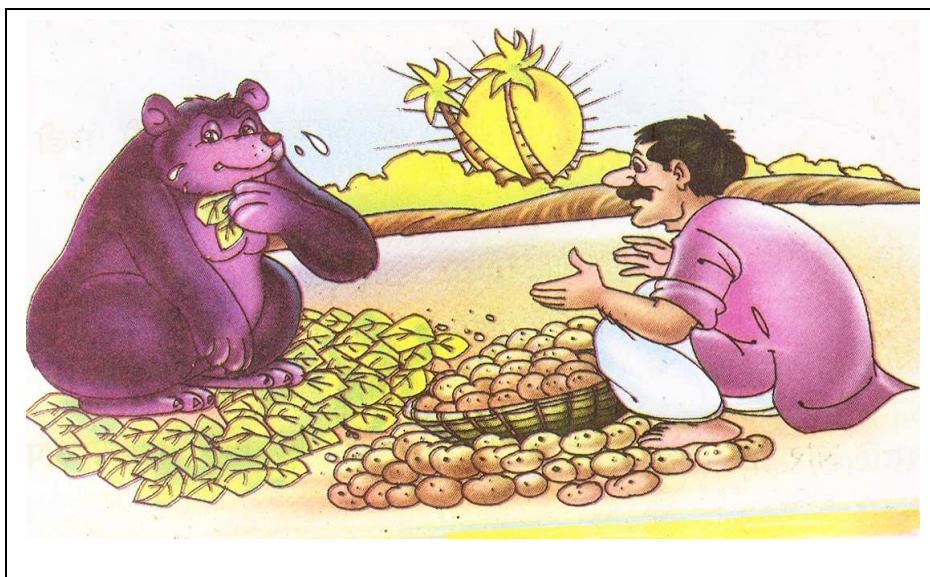
किसान ने आलू बो दिए। फसल आई तो भालू को पत्ते खाने को मिले। भालू चिढ़कर रह गया।

अगली बार भालू ने कहा, ''देखो इस बार ज़मीन के नीचे की फसल मेरी और ऊपर की तुम्हारी।'' किसान ने गेहूँ बो दिया। जब फसल तैयार हुई तो किसान को मिले चमकीले गेहूँ। भालू को मिलीं खाली जड़ें। भालू खीझकर रह गया।
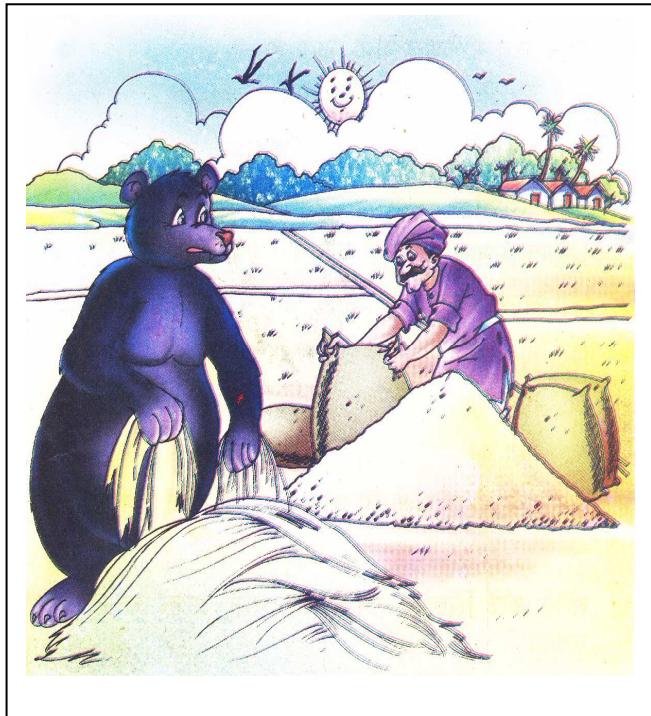
इस बार भालू ने किसान को मज़ा चखाना चाहा। उसने किसान से कहा, ''ज़मीन के सबसे ऊपर और जमीन के नीचे की फसल मेरी।'' किसान मान गया।

इस बार किसान ने बोया गन्ना। जब फसल आई तो भालू को मिल पत्ते और जड़ें। भालू का सिर चकरा गया।

दोस्त की मदद

किसी तालाब में एक कछुआ रहता था। तालाब के पास माँद में रहने वाली एक लोमड़ी से उसकी दोस्ती हो गई।
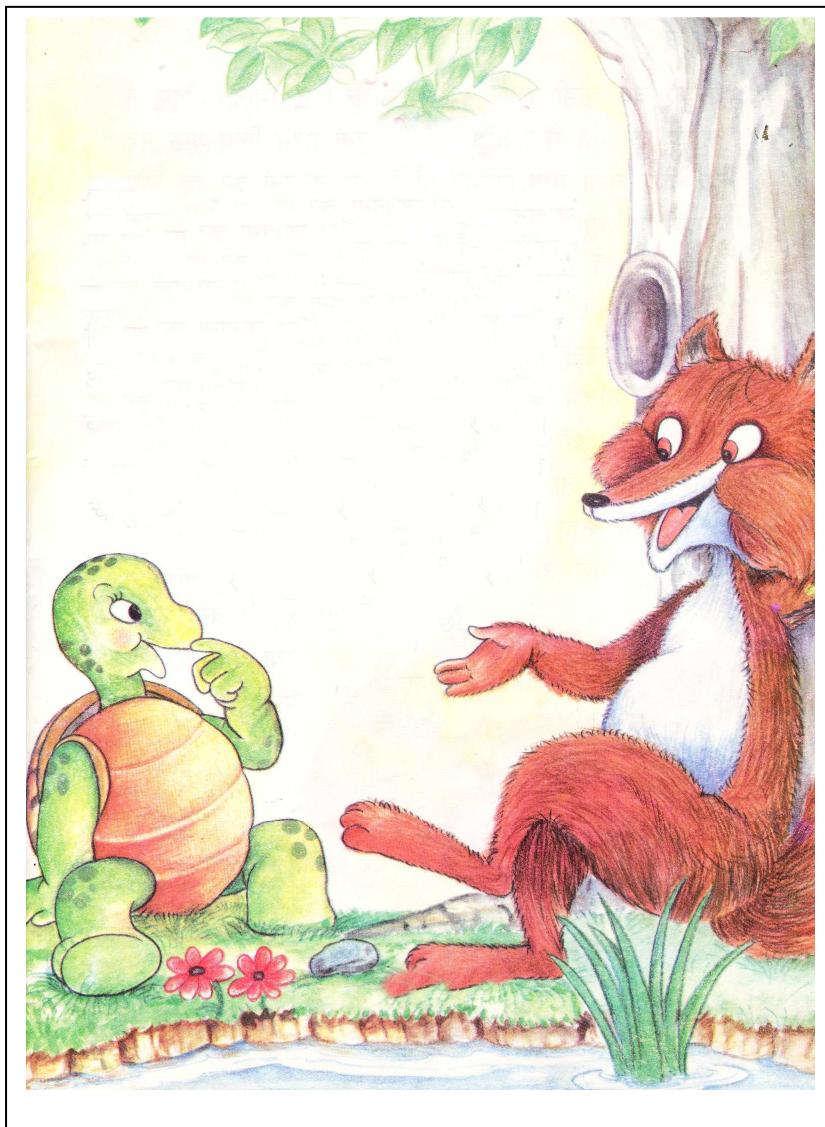
एक दिन वे तालाब के किनारे गपशप कर रहे थे कि एक तेंदुआ वहाँ आया। दोनों अपने-अपने घर की ओर जान बचाकर भागे। लोमड़ी तो सरपट

दौड़कर अपनी माँद में पहुँच गई पर कछुआ अपनी धीमी चाल के कारण तालाब तक नहीं पहुँच सका। तेंदुआ एक छलाँग में उस तक पहुँच गया।
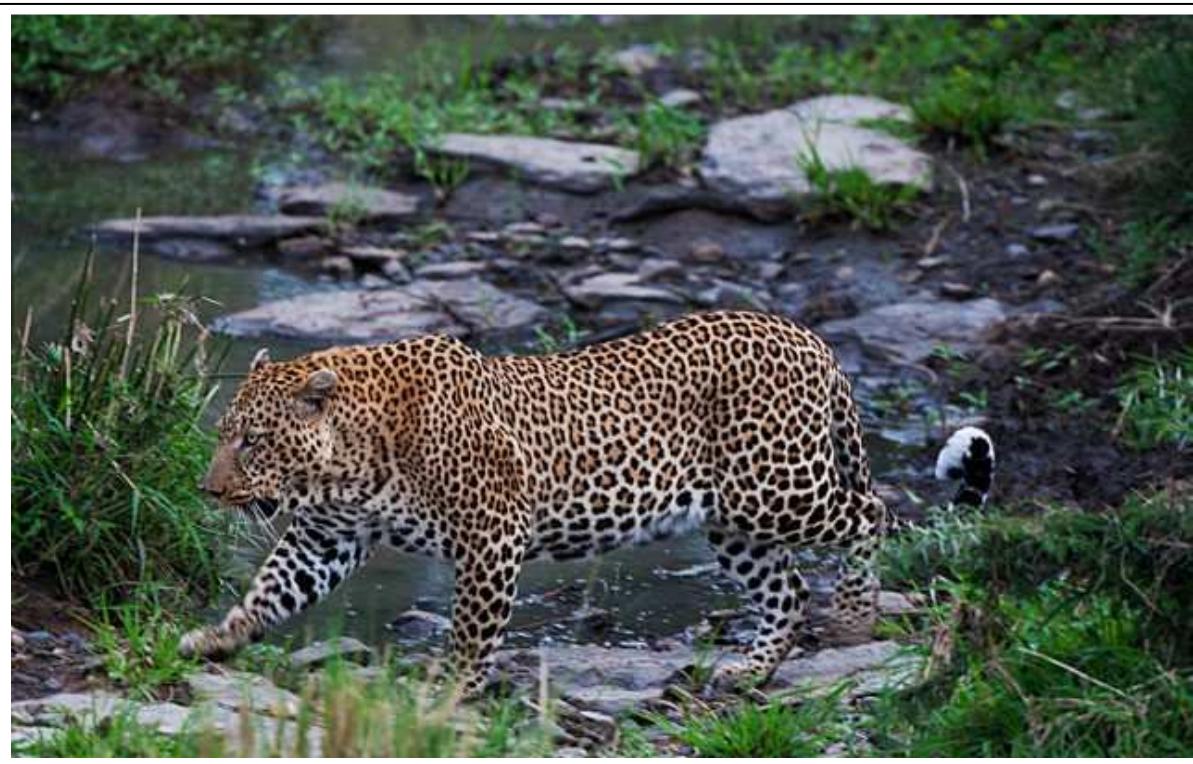
कछुए को कहीं छुपने का भी मौका न मिला। तेंदुए ने कछुए को मुँह में पकड़ा और उसे खाने के लिए एक पेड़ के नीचे चला गया लेकिन दाँतों और नाखुनों का पूरा ज़ोर लगाने पर भी कछुए के सख्त खोल पर खरोंच तक नहीं आई।
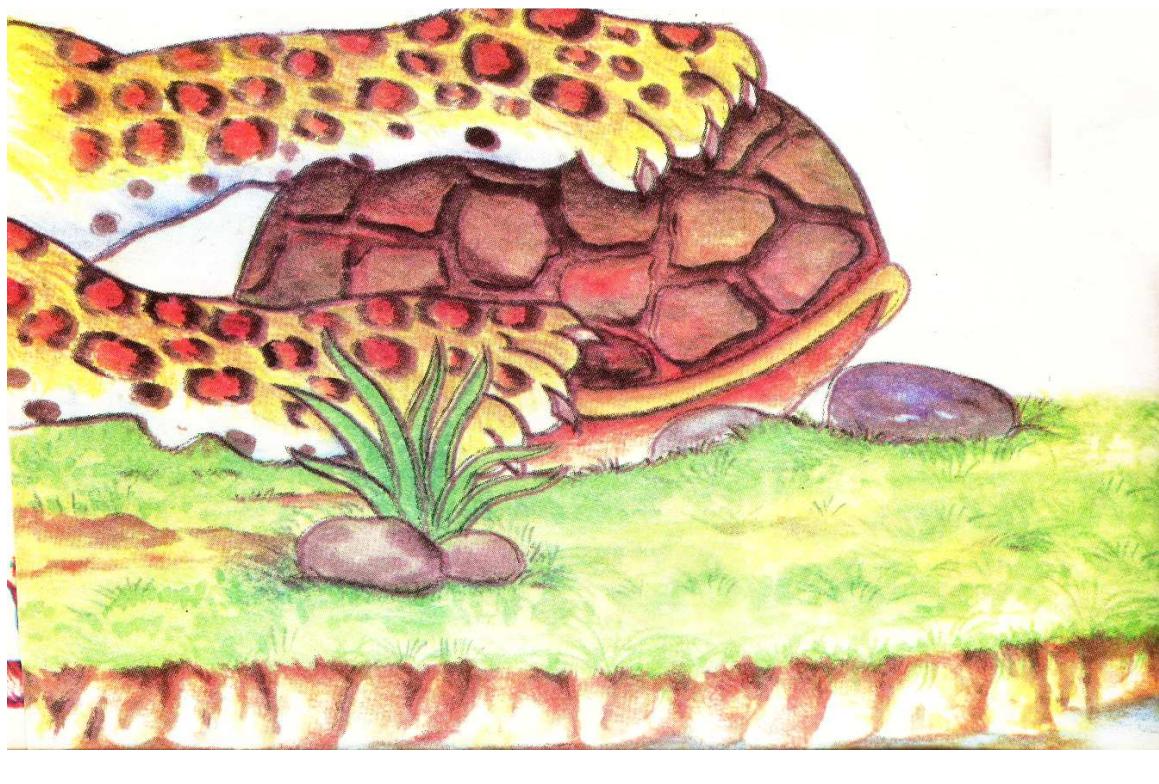
लोमड़ी अपनी माँद से यह देख रही थी। उसने कछुए को बचाने की तरकीब सोची। उसने माँद से झाँककर बाहर देखा और भोलेपन के साथ बोली–तेंदुए जी, कछुए के खोल को तोड़ने का मैं आसान तरीका बताती हूँ। इसे पानी में फेंक दो। थोड़ी देर में पानी से इसका खोल नरम हो जाएगा। चाहो तो आजमाकर देख लो!

तेंदुए ने कहा–ठीक है, अभी देख लेता हूँ!

यह कहकर उसने कछुए को पानी में फेंक दिया। बस फिर क्या था, गया कछुआ पानी में!

Appendix - B

<u>**A quantitative analysis of the data reveals the following results**</u>:

I. Writing

Category	No. of Children's (No. of C)	Percentage (%)
1. The child wrote the name, village name and familiar words and recognized the letters.	189	56.75
2. Did not write at all but recognized the letters.	6	1.80
3. The child wrote name/village name/ familiar words/ and recognized the letters.	129	38.74
4. The child did not write the name, village name, familiar words and did not recognize the letters.	7	2.10

II. Reading Comprehension

Category	No. of Children's (No. of C)	Percentage (%)
1. Read both the stories	179	53.75
2. Answered the comprehension questions to both the stories	101	30.33
3. Answered the comprehension question to only the familiar story	19	5.71
4. Answered the comprehension question (s) to only the unfamiliar story	3	0.90
5. Child refused to read the stories but recognized the letters	83	24.92
6. Read both the stories but did not answer any comprehension question	80	24.02
Familiar Story		
Read only the familiar story	13	3.90
Read only the familiar story and did not answer the question (s)	25	7.50
Unfamiliar Story		
Read only the unfamiliar story	1	0.30
Read only the unfamiliar story and did not answer the question (s)	4	1.20
7. (i) Turned the pages in both the stories.	99	29.72
(ii) Turned the pages in the familiar story.	18	5.40
(iii) Did not turn the page in both the stories	87	26.12
(iv) Turned the pages in the unfamiliar story.	21	6.30

III. Writing and Reading

Category	No. of Children's (No. of C)	Percentage (%)
1. Did not write but attempted to read the stories	1	0.30
2. Did not read the stories but attempted to write	81	24.32
3. The child could not write the village name and familiar words, did not recognize the letters and did not read the story.	7	2.10
4. The child wrote the name, village name and familiar words, recognized the letters and read the stories and answered the comprehension questions.	67	20.12

IV. Exposure to Stories

Category	No. of Children's (No. of C)	Percentage (%)
The child is told story		
(a) At home	120	36.03
(b) At school	247	74.17
The child names a favourite story or poem		
(a) Story	242	72.67
(b) Poem	80	24.02

Appendix- C

विद्यालयों की सूची
जिला- मथुरा

	विद्यालय	न्यायपंचायत	विकासखंड
1	प्राथमिक विद्यालय गढ़ी बेरी	पीलुआ सादिकपुर	
2	प्राथमिक विद्यालय इकदंता	धानाजीवना	
3	प्राथमिक विद्यालय महुअन 1	दौलतापुर	
4	प्राथमिक विद्यालय वाकलपुर	झुरावाई	फरह
5	प्राथमिक विद्यालय मेघपुर	रैपुराजाट	
6	प्राथमिक विद्यालय मुस्तफाबाद	परखम	
7	प्राथमिक विद्यालय झण्डीपुर	बरारी	
	विद्यालय	न्यायपंचायत	विकासखंड
1	प्राथमिक विद्यालय न. बंजारा	अडिंग	
2	प्राथमिक विद्यालय पलसों 1	महरौली	
3	प्राथमिक विद्यालय राँकौली	नीमगाँव	
4	प्राथमिक विद्यालय गोपालपुर	मगौर्रा	
5	प्राथमिक विद्यालय न. टौंटा	मल्हू	गोवर्धन
6	प्राथमिक विद्यालय देवसेरस 11	गठौली	
7	प्राथमिक विद्यालय न. आन्धू	सोन	
8	प्राथमिक विद्यालय तसिया	बछगाँव	
	विद्यालय	न्यायपंचायत	विकासखंड
1	प्राथमिक विद्यालय ढकपुरा	गैयरा	
2	प्राथमिक विद्यालय सारस	भैसारा	
3	प्राथमिक विद्यालय खलौहा	मदैम	
4	प्राथमिक विद्यालय कुम्हा	गजु	
5	प्राथमिक विद्यालय गढ़ी लाल सिंह	अनौड़ा	राया
6	प्राथमिक विद्यालय नंगला सहसू	नगल	
7	प्राथमिक विद्यालय गौसना	लोहवन	
8	प्राथमिक विद्यालय धोक सुमेरा	सौनाई	

	विद्यालय	न्यायपंचायत	विकासखंड
1	प्राथमिक विद्यालय अभयपुरा	मडुआका	
2	प्राथमिक विद्यालय भिदौनी	सुरीर कला	
3	प्राथमिक विद्यालय हमजापुर	मिट्ठौली	
4	प्राथमिक विद्यालय जरेलिया	हसनपुर	
5	प्राथमिक विद्यालय मीरपुर	बेरा	नौहझील
6	प्राथमिक विद्यालय पिथौरा	बरौठ	
7	प्राथमिक विद्यालय कौलीनी	बाघई	
8	प्राथमिक विद्यालय लालपुर	शल्ल	

	विद्यालय	न्यायपंचायत	विकासखंड
1	प्राथमिक विद्यालय दलौता	सेही	
2	प्राथमिक विद्यालय आझई 11	आझई	
3	प्राथमिक विद्यालय भरना कलॉ 1	भरना कलॉ	
4	प्राथमिक विद्यालय जमालपुर	सेमरी	
5	प्राथमिक विद्यालय सिहाना	सिहाना	चौमुहा
6	प्राथमिक विद्यालय अगरयाला	अगरयाला	
7	प्राथमिक विद्यालय तरौली शुमाली	तरौली	
8	प्राथमिक विद्यालय ततारपुर	सहार	

Appendix- D

Details of teacher orientation programmes

There were 1200 teachers, 47 NPRCs, 10 ABRCs and 5 BRCs involved in the project schools. Orientation programmes were conducted every year with these teachers. These orientations were conducted by NCERT Faculty along with the support of Master Trainers. Initially the team of Master Trainers comprised of BRCs, ABRCs and NPRCs from the project blocks of Mathura. Every year this team was reviewed and revised based on the developing understanding and support provided to teachers in the field. Over the years, teachers were also given the responsibility of Master Trainers.

Care was taken to ensure that each batch in the orientation programmes had a maximum of 35 participants. Therefore, every year, the number of batches in orientation programmes ranged between 30-35. The orientations were conducted in a block wise manner in the project schools.

The orientation programmes have always been conducted in an interactive manner. Experiences and observations of participants have always been given preference. The sessions were based on discussions, activities, plays and group work. Reading material in the form of books, hand-outs were shared with participants. Video programmes, posters, writing samples of children were also extensively used to develop understanding.

The details of the orientation programmes are as follows:

2008-09

Master Trainers- 20
Duration of Master Trainer's orientation- 3 days
Duration of Teachers, NPRCs, ABRCs orientation- 3 days
Duration of Refresher programme- 2 days

Focus areas of Orientation
- Introduction and objectives of the Programme
- Experiences and challenges of teaching reading
- Understanding reading
- How do children learn to read
- Print rich environment in the classroom
- Role of textbook
- Reading corner in the classroom
- Role of children's literature
- Graded reading series 'Barkha' and its usage
- Various activities for reading- writing eg. Morning message etc.
- Assessment of reading
- Planning implementation in the classroom
- Roles and responsibilities of various stakeholders involved

2009-10

Master Trainers- 20
Duration of Master Trainers orientation- 2 days
Duration of Teachers, NPRCs, ABRCs orientation- 2 days
Duration of Refresher programme- 2 days

Focus areas of Orientation
- Experiences and challenges being faced by the teachers
- Understanding the processes of reading
- How do children learn to write
- Print rich environment in the classroom
- Linking textbook with children's literature
- Effective usage of Reading corner in the classroom
- Story-telling and read-alouds in the classroom.
- Independent reading time for children everyday
- Using the green running board as a space for children
- Planning implementation in the classroom

2010-11

Master Trainers- 25
Duration of Master Trainers orientation- 2 days
Duration of Teachers, NPRCs, ABRCs orientation- 2 days
Duration of Refresher programme- 1 day

Focus areas of Orientation
- Teachers experiences
- Physical arrangement of the classroom
- Understanding the processes of reading and writing
- Developmental phases of reading and writing
- Role of textbook
- Maintenance of books in the reading corner
- Provision of stationery in the reading corner
- Using children's literature for reading-writing opportunities
- Children's magazine ' *Firkee bachchon ki*'
- Taking observations and writing journals/reflective diary
- Maintaining profiles of children
- Indicators for assessment
- Making weekly plans/ planning reading-writing opportunities with stories and poems

2011-12

Master Trainers- 25
Duration of Master Trainers orientation- 2 days
Duration of Teachers, NPRCs, ABRCs orientation- 2 days

Focus areas of Orientation
- Sharing of experiences-achievements and challenges
- Discussions on the processes of reading and writing
- Using children's literature for reading-writing opportunities
- Experiences with morning message
- Children's magazine ' *Firkee bachchon ki*'
- Discussions on teachers observations and writing journals/reflective diary
- Strengthening procedures of assessment
- Strengthening the teachers plannings of reading-writing opportunities with stories and poems
- Developing a channel of correspondence through letters
- Making school libraries functional and accessible for children

Appendix- E

Supporting team at Mathura for the End term survey

Name	Designation	District/Block
Mr. Pradeep Pandey	District Pedagogy Co-ordinator	Mathura
Ms. Mithlesh Saxena	NPRC	Govardhan
Mr. Ghanshyam	NPRC	Govardhan
Mr. Murari Lal	NPRC	Govardhan
Mr. Uma Shankar	NPRC	Govardhan
Mr. Ram Singh	NPRC	Govardhan
Mr. Man Singh	NPRC	Govardhan
Mr. Saheb Singh	NPRC	Govardhan
Mr. Bhagwan Singh	NPRC	Govardhan
Mr. Shiv Charan Lal	NPRC	Fareh
Mr. Tara Chandra	NPRC	Fareh
Mr. Lalit Kumar	NPRC	Fareh
Mr. Naresh Chandra Sharma	NPRC	Fareh
Ms. Sandhya Sharma	NPRC	Fareh
Mr. Jagat Singh	NPRC	Fareh
Mr. Tara Chandra	NPRC	Fareh
Mr. Harigyan Singh	NPRC	Naujheel
Mr. Banwari Lal Sharma	NPRC	Naujheel
Mr. Madan Singh	NPRC	Naujheel
Mr. Maan Singh	NPRC	Naujheel
Mr. Pratap Singh	NPRC	Naujheel
Mr. Soran Singh	NPRC	Naujheel
Mr. Kedar Singh	NPRC	Naujheel
Mr. Ramveer Singh	NPRC	Naujheel
Mr. Vipin Bihari	NPRC	Raya
Mr. BalBir Singh	NPRC	Raya
Mr. Rameshwar Dayal	NPRC	Raya
Mr. Rajendra Prasad Gaund	NPRC	Raya
Mr. Ram Gopal Sharma	NPRC	Raya
Mr. NetraPal Singh	NPRC	Raya
Mr. Sughad Singh	NPRC	Raya
Mr. Madan Mohan	NPRC	Chaumuha
Ms. Veena Dixit	NPRC	Chaumuha
Mr. Manohar Lal	NPRC	Chaumuha
Mr. Om Prakash Sharma	NPRC	Chaumuha
Ms. Prabha Devi	NPRC	Chaumuha
Mr. Dev Hans	NPRC	Chaumuha
Mr. Madan Singh	NPRC	Chaumuha

विद्यया ऽ मृतमश्नुते

एन सी ई आर टी
NCERT
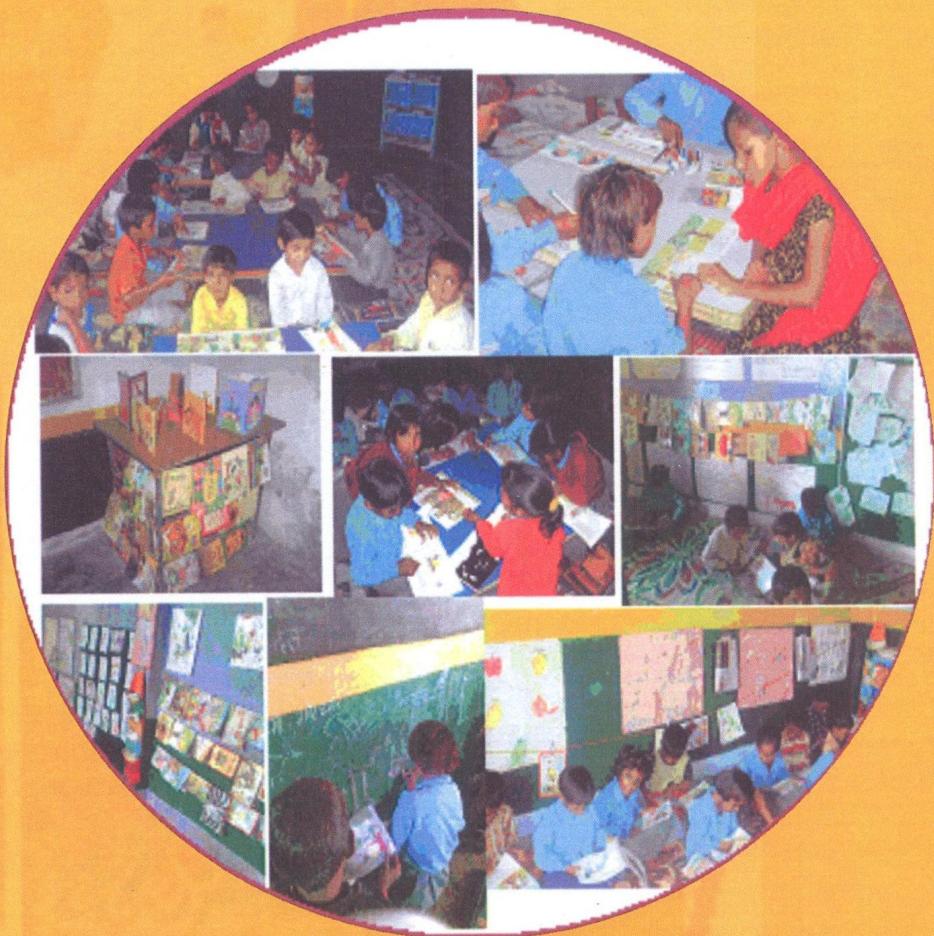
राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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