

ShikshakParv
Foundational Literacy and Numeracy – A Summary

Session Details

Date: 18.09.2020

Timing: 10.00AM – 12.00 Noon

Coordinator: Prof. Anup Rajput

Speakers: Prof. Anup Rajput

Prof. Usha Sharma

Smt. Sudha Painuli

Summary of the Presentation: Under the month long Shikshak Parv programme, the session on *Foundational Literacy and Numeracy* was organized on 18.9.2020. The session started at 10.00AM. Prof. Anup Rajput, Head, Publication Division, NCERT, conducted the session, in his role as coordinator. He welcomed the panelists and viewers. He introduced his fellow speakers and delineated the format of the session. Prof. Rajput's presentation would focus on fundamental numeracy, while Prof. Usha Sharma would present material on fundamental literacy. Later, they would have a discussion with Smt. Sudha Painuli to get a practitioner's perspective on Fundamental Literacy and Numeracy (FLN). His presentation emphasized the need for an integrated approach to fundamental literacy and fundamental numeracy. He then introduced Prof. Usha Sharma, Department of Elementary Education, NCERT and invited her to present. She highlighted the link between reading, writing, listening and speaking which is crucial to attain fundamental literacy. Prof. Rajput thanked Prof. Sharma for thoroughly explaining the concept of foundational literacy and summarized the main points from her presentation. He then introduced the final speaker, Smt. Sudha Painuli, Vice Principal, EMRS Dehradun and National Teacher Awardee 2020. She appreciated the NEP 2020 proposed National Mission on Foundational Literacy and Numeracy and highlighted the need for friendly environment in schools. Prof. Rajput thanked her for her inputs and shared the gist of her speech. He thanked all the listeners for joining the session and concluded the session by saying that today's session only explained the provision detailed in NEP 2020 regarding FLN. He urged all the stakeholders to participate and take ownership of the policy to ensure its successful implementation.

Highlights of the Presentations

Prof. Anup Rajput

It has been internationally recognized that fundamental literacy and fundamental numeracy must go hand in hand. This requires an integrated approach; they cannot be taught in isolation. Fundamental Literacy and Numeracy (FLN) starts at home and thus students may have different contexts when they enter schools.

Learning FLN before school is required. To that end, we must recognize the primacy of Early Education. FLN is an urgent and necessary prerequisite to learning.

Need of FLN:

- Low learning levels
- Increased drop-out rate
- Inappropriate language and mathematical skills

Universal FLN – Objectives:

- Making learners competent in doing meaningful reading and writing by the time they enter grade 3.
- Developing the basic understanding and competencies related to numeracy and its related concepts among young learners till grade 2.
- Developing skills among the learners to amalgamate their outside school experiences in their classroom learning to attain foundational literacy and numeracy in a better way.

Curricular Expectations:

- Pedagogy – should include stress- free play-way and experiential activities.
- Resources – Locally developed as per National Guidelines so that the material is contextual.
- Assessment – Formative Assessment and Adaptive Assessment.
- Mathematical thinking– numeracy, number sense and spatial understanding.

- Literacy – Reading with comprehension, Writing with understanding, Speaking with coherent thought.
- On the basis of all this Curriculum has to be developed.

Foundational Numeracy includes:

- Competent counting
- Understanding about Numbers
- Development of Number sense
- Development of Mathematical Thinking
- Application of Basic Operations on Numbers for problem solving

Numeracy and Mathematical understanding:

- Visualisation
- Spatial understanding – space, size, position
- Pre-number Concepts
- Number Sense
- Mathematical Vocabulary

ELPS Approach should be adopted:

- **E** – Experience with physical object
- **L** – spoken Language that describes the experience
- **P** – Pictures that represent the experience
- **S** – written Symbols that generalize the experience

Integration of literacy and numeracy:

- Mathematical Terminology as a part of daily language
- Use of language in understanding mathematical ideas
- Language for disposition of mathematical thinking
- Precise Communication – Language with mathematical ideas

SPM – School Preparation Module Preparatory Class or ‘BALVATIKA’:

- Module – where 3 months play-based learning is undertaken to prepare children for Grade 1. This is considered a downward extension.

- Elements of SPM – Activities and workbooks around sounds, words, alphabets, colors, shapes and numbers involving collaborations with peers and parents.
- Material – to be developed by NCERT & SCERT
- Where?
 1. Standalone Anganwadis
 2. Anganwadis co-located with schools
 3. Pre-primary schools
 4. Standalone pre-schools

Health and Nutrition is a crucial aspect of Foundational Years:

- Regular health check-ups and health card.
- Boosting mental and physical health
- Energizing breakfast in addition to mid- day meal.

Resources required for FLN are:

- Setting up of School and Public Libraries in remote areas - By Schools, community, local Government
- Digital Libraries for all – DIKSHA, e-pathshala, NROER
- Workbooks and activity material - Learning Kit, Play-based material
- National Book Promotion Policy - To ensure the availability, accessibility, quality and readership of books.

Peer Tutoring is important for teachers and students alike:

- One-to-one peer tutoring is extremely effective for learning not just for the learner but also for the tutor.
- It can be taken as a voluntary and joyful activity for fellow students under the supervision of trained teacher.
- Every literate member of the community could commit to teaching one student how to read, it would change the county's landscape very quickly.

Assessment should be:

- Adaptive Assessment – the goal is not to compare children, but to reward them for their learning to further motivate them.

- Formative Assessment – this is for the school system to understand where the child stands and what more he/she needs from the learning process.

Action Points for Universal FLN:

- Curriculum Revamping
- Pedagogical Innovations
- Restructuring of Teacher Education Programs
- Revisiting Assessments
- Administrative Support

Implementation of Universal FLN:

- Highest Priority to Universal FLN
- Setting up of National Mission by MoE
- Implementation plan to be prepared by State/UT governments
- Universal FLN by 2025

UshaSharma .Prof

Generally, the word literacy is associated with a literate society and adult education. However fundamental literacy is crucial for children.

Fundamental literacy is not limited to recognizing alphabets and words. It goes beyond reading and writing to include speaking and listening. Thus, the four competencies that are involved in literacy take place simultaneously- reading writing listening and speaking

Language is understood through neurological development. Frontal lobe of the brain is responsible for thought as well as speaking. These processes occur simultaneously and the flow between the two develops only with continuous use of language.

Reading Competency:The first thing children wish to learn to read and write is their own name.

- Meaning-making process –Reading has no real beginning or end.

- Natural process–Reading skills are spontaneous and natural for those who are given opportunities to read, but complex and enigmatic for those who remain entangled in preparation for reading
- Joyful process–Today, even small children are reading messages or posts on social media. Advancement of technology has led to advancement in reading.
- Various purposes –The purpose for reading defines its style like scan reading or skip reading.
- Comprehension – Reading only becomes meaningful when the child understands what he/she reads.

Three important indicators associated with Reading: These vary in different languages.

1. Graphophonics- shapes of letters and sounds associated with them.
2. Syntax- sentence structure
3. Semantics- meanings of words

Reading comprehension is very complex in nature. It is not merely a function of decoding or knowing the meaning of individual words.

Writing Competency: Drawing pictures is part of writing as well.

The process of writing involves- prewriting, writing, rewriting.

Writing with coherence of thought is crucial. It includes the processes of:

- discovery through language
- exploration of what we know and what we feel about what we know through language
- communication of what we learn about our world
- using language to learn about our world and then to evaluate what we learn about our world
- independent writing

Reading and writing are connected through:

- Coherence of thought and expression
- Language and literacy
- Context

- Vocabulary

Quality resources are needed for both, learners and teachers:

- For Learners- Story books, collection of poems, magazines, posters etc. List of children's literature is available on the NCERT website.
- For Teachers- source books, brochures, posters for teacher training.

Prof. Sharma reiterated two points from the PM's address during the Conclave:

1. *Sochand* approach need to be changed
2. Reading materials should be available in the mother tongue through adapted translations and multilingual dictionaries.

How can foundational literacy be achieved:

- Curriculum re-designing
- Pedagogical innovations
- Reformation of teacher education programmes
- Administrative initiatives for development of resources

Smt. Sudha Painuli

Smt. Painuli appreciated the various provisions for FLN in NEP-2020:

1. NEP-2020 approaches FLN with a revolutionary mindset. The focus is on achieving literacy goals that have not been reached yet.
2. If National Mission on FLN is taken up like Swachh Bharat Abhiyan, success is guaranteed. By 2025, children will be prepared to understand formal school when they enter school.
3. NEP-2020 discards the centrality of English by promoting mother tongue education in early years. Focus should be on Knowledge and not on fluency in English. FLN will help children understand their own surroundings.
4. Friendly environment in school is necessary to ensure joyful learning. Children should be eager to go to school. Emotional and ethical development is important for

personality development of children. Emphasis should be on teaching social etiquette, teamwork and sympathy.

5. NEP-2020 recognizes that special training is required for teachers engaged in early education. Provisions have been made for training Anganwadi teachers and preschool teachers in a 6-month course.
6. The Focus has to be on teaching the child *how to learn*, and not on rote memorization. Children pick up language by listening and talking rather than formal teaching.
7. Logical thinking must be promoted and the centrality of FLN in daily life must not be forgotten.