

“FOUNDATIONAL LITERACY AND NUMERACY”



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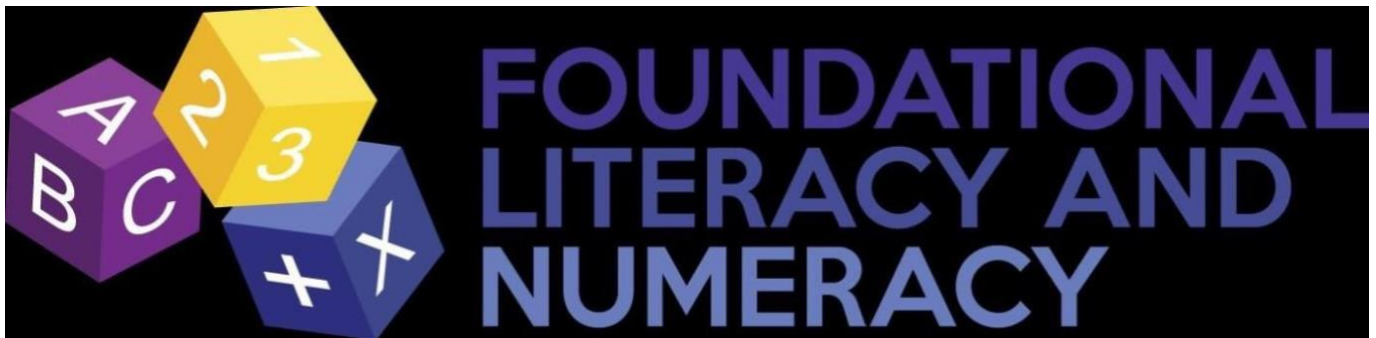
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Effective Teaching and Learning Practices for FLN-



👉 **THEME:** strengthening instructional practices to build basic skills.

INTRODUCTION: Effective teaching and learning practices are strategies that help students learn and achieve their goals . **Effective teaching directly and indirectly contributes to students** : Academic achievement improved relationships with the teacher Improved wellbeing motivation and of with the school. The education system should be designed to design to focus on the globalization, urbanization, modernization and industrialization. So our education system introduced and if it NEP 2020. The main aim of 2020 to develop a strong foundational In literacy and numeracy for all children and I enabling them to

become proficient readers writers and mathematicians FLN achieves universal FLN skills by 2025 introduce pre primary education. FLN emphasis on developing FLN skills in children .

- **Pre-primary education**:-introduction of preprimary education for children aged 3-5 years to develop FLN skills
- **National mission on foundational literacy and numeracy**:- Establishment of a national mission to achieve universal FLN skills by 2025.
- **Teacher training**: Emphasis on training teachers to develop FLN skills in children. The national educational policy NEP2020 aims to develop a strong foundation in literacy and numeracy for all children, enabling to become proficient readers, writers and mathematicians .

Foundational Literacy and Numeracy

**Recognizing
the primacy
of Early
Education**



**An urgent
and
necessary
pre-
requisite
to learning**

Key components of FLN.

1.Litracy:develop reading writing and comprehension skills.

2.Numaracy:develop number series place value and basic arthematic operations .

3.Pre-reading and Pre-writing Skills: Develop skills like phonological awareness ,alphabet knowledge and fine motor skills.

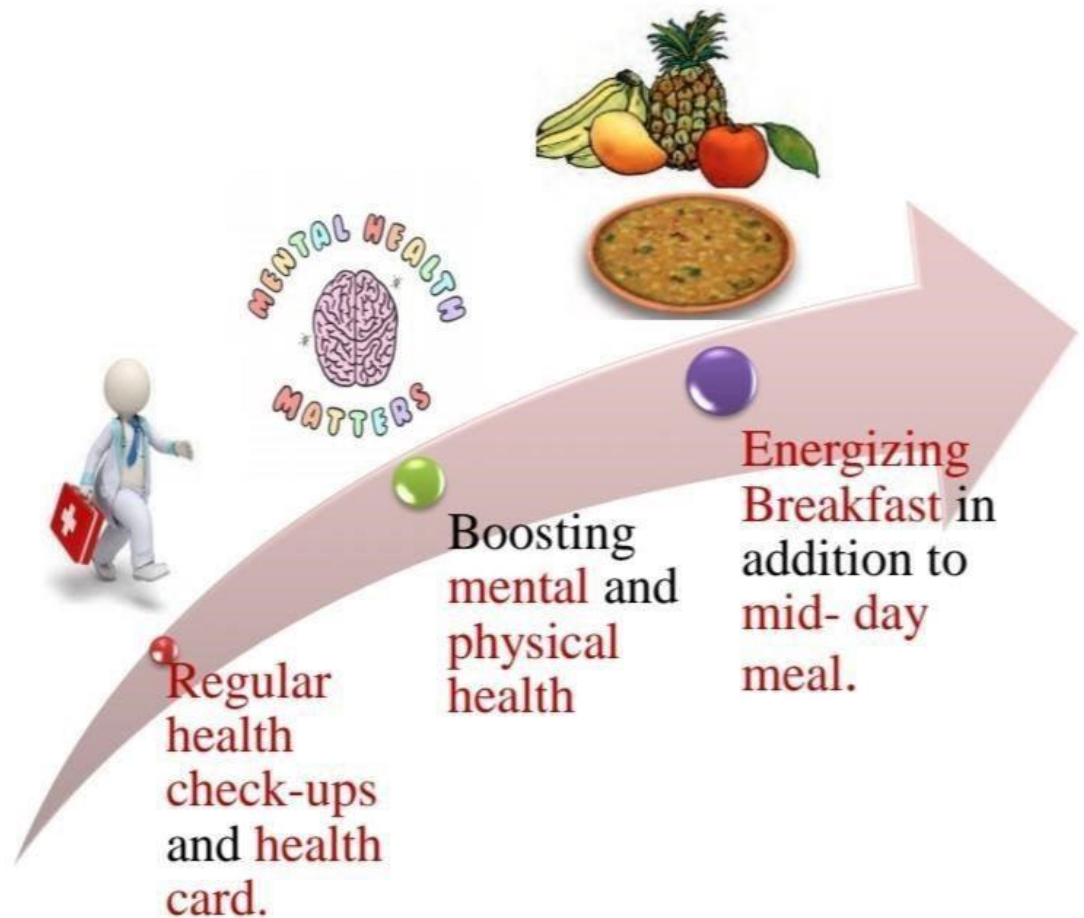
© Objectives of FLN

- 1. Develop Foundational Skills:** Develop foundational literacy and numeracy skills in children.
- 2. Improve Learning Outcomes:** improve learning outcomes in literacy and numeracy.
- 3. Reduce Learning Gaps:** Reduce learning gaps and promote equity in education. By introducing FLN The NEP 2020 aims to lay a strong foundation future learning,ensuring that all children can read, write and perform basic Arithmetic operations by the end of Grade 3 .

°Effective Teaching and Learning practices for FLN

Effective teaching is the knowledge, strategies process and behaviors which lead to good student outcomes Effective teachers have a positive to impact on their students and use their expertise to improve learning. These good outcomes are often those that can be measure easily ,usually through summative aassessment. However, it's also important to remember that not all aspects of effective teaching are immediately visible or measurable. Effective teachers cultivate excellent working relationships write their students within safe and respectful environments.Effective teaching is much more than end of year data.

Health and Nutrition



It is an ongoing, reflective practice that needs to be refined and amended to suit learners needs.

Effective teachers nurture effective learners who are actively involved in their own learning and personal development. They can manage a classroom to remove or reduce instances of behaviour that challenges introduce new information in an engaging and accessible way and provoke curiosity in the subject matter to promote higher order thinking, Effective teachers also love their subject and use their experience and pedagogical knowledge in order to create high quality learning.

- Importance of effective teaching and learning practices :-

“ Students Effective Teaching helps students to achieve their goals both personal and academic we know that effective teachers can be highly influential figures to many young people providing them with both certainty and assurance when they need it the most”.

•**Characteristics of Effective Teaching and Learning Practices:-**

- Here are some of the main characteristics of effective teaching, alongside tips on how to practice them successfully within the classroom .

- Create a Positive learning environment
- Motivate
- Narture positive relationship
- Understand classroom management
- Have strong communication skills
- Have secure subject knowledge
- Be passionate
- Provide high quality learning opportunities
 1. Scaffolding
 2. Using effective instruction
 3. Developing metacognition
 4. Using assessment for learning effectively.
- Reflections

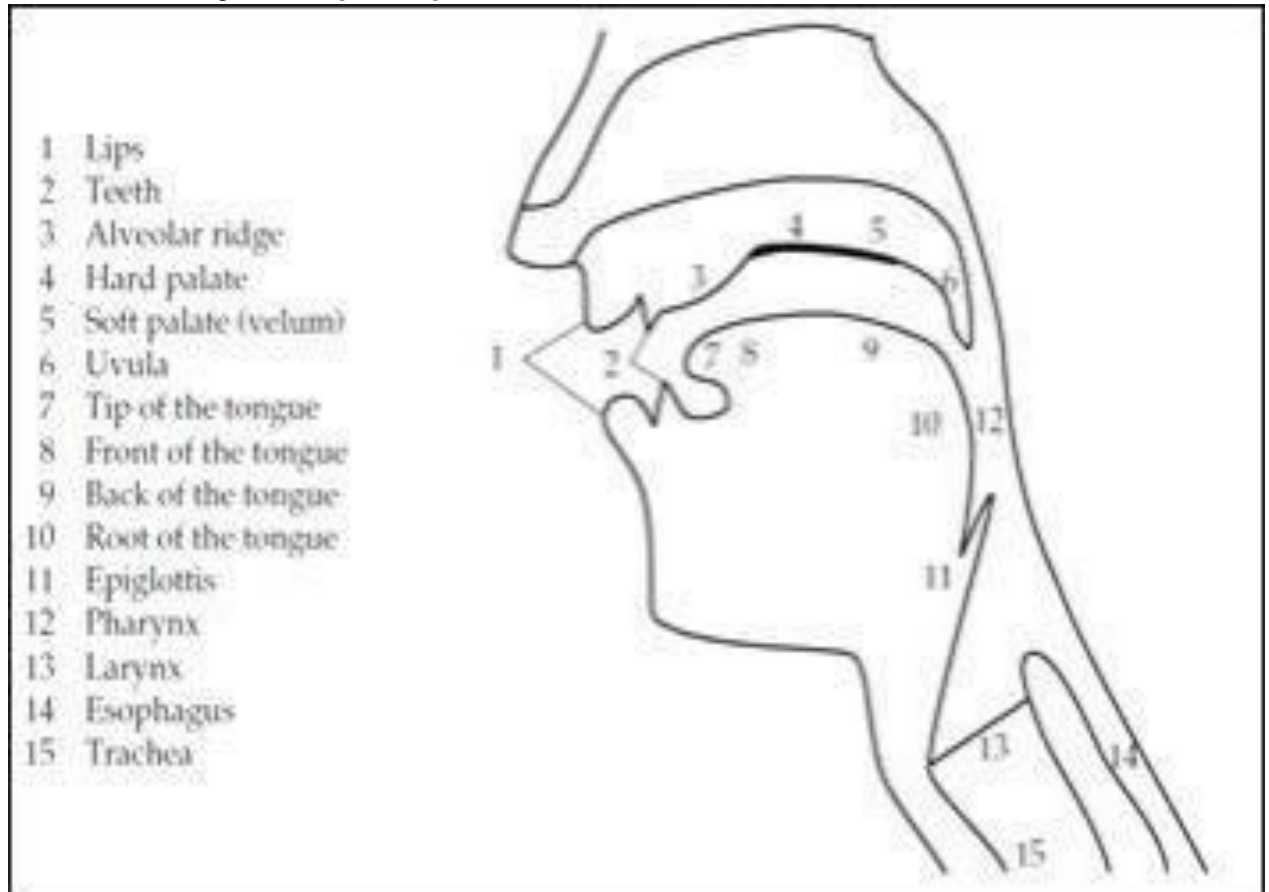
NEP2020:Augmenting students learning the outcomes through FLN Recognizing the importance of early dreaming.The national education policy 2020 status that “our highest priority must be to achieve universal Foundational literacy and numerical FLN in primary school and beyond by 2025 The rest of the policy will be largely irrelevant for such a large portion of our students if these most basic learning [reading writing and arthematic at the foundational level] is not first ”

A. Teaching to Read: Here are some effective teaching and learning practices per foundational literacy and numeracy teaching to read.

•**Phonic :**

Phonetics is the study of two sounds of spoken language is a branch of linguistic that examines the physical properties of speech sounds ,how they are produced and how they are perceived by listeners.

➤ •**Key concepts in phonetics**



Phonemes: the smallest unit of sound in a language that distinguish one word from another .

Allophones: variant of phonemes that occur in specific context

Syllables : units of sound that contains a vowel sound and are used to form words

Articulation: the process of producing speech sounds using the lips tongue teeth and vocal cords **Transcriptions:** The process by representing speech sounds using written symbols such as true the International Phonetic Alphabet[IPA]

•Phonetics transcription

International phonetic alphabet: a standardized system for transcribing speech sounds using unique symbols.

phonetic transcription exercise: practice transcribing words and phrases using the IPA to improve phonetic Awareness and transcription skills.

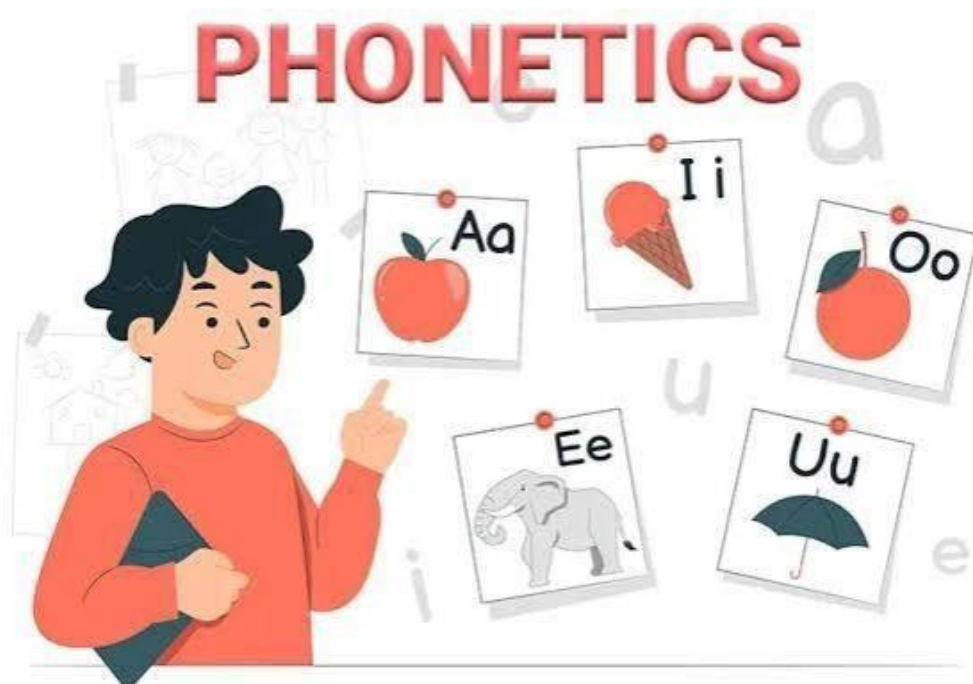
Applications of phonetics

Language teaching: Phonetics is essential for language teachers to teach pronunciation and into nation.

Speech Therapy: phonetics is used in speech therapy to diagnose and treat speech disorders

Forensic Linguistics: phonetics is used in forensic linguistics to analyze speech evidence in legal cases .

Speech Recognition technology: Phonetics is used in speech recognition technology to develop accurate speech recognition systems



Phonemic Instruction :-

systematic phonics: Teach phonic skills is a logical any sequential manner.

Phonics Basic Reading Instruction: use phonics- based instruction on to teachers students to read.

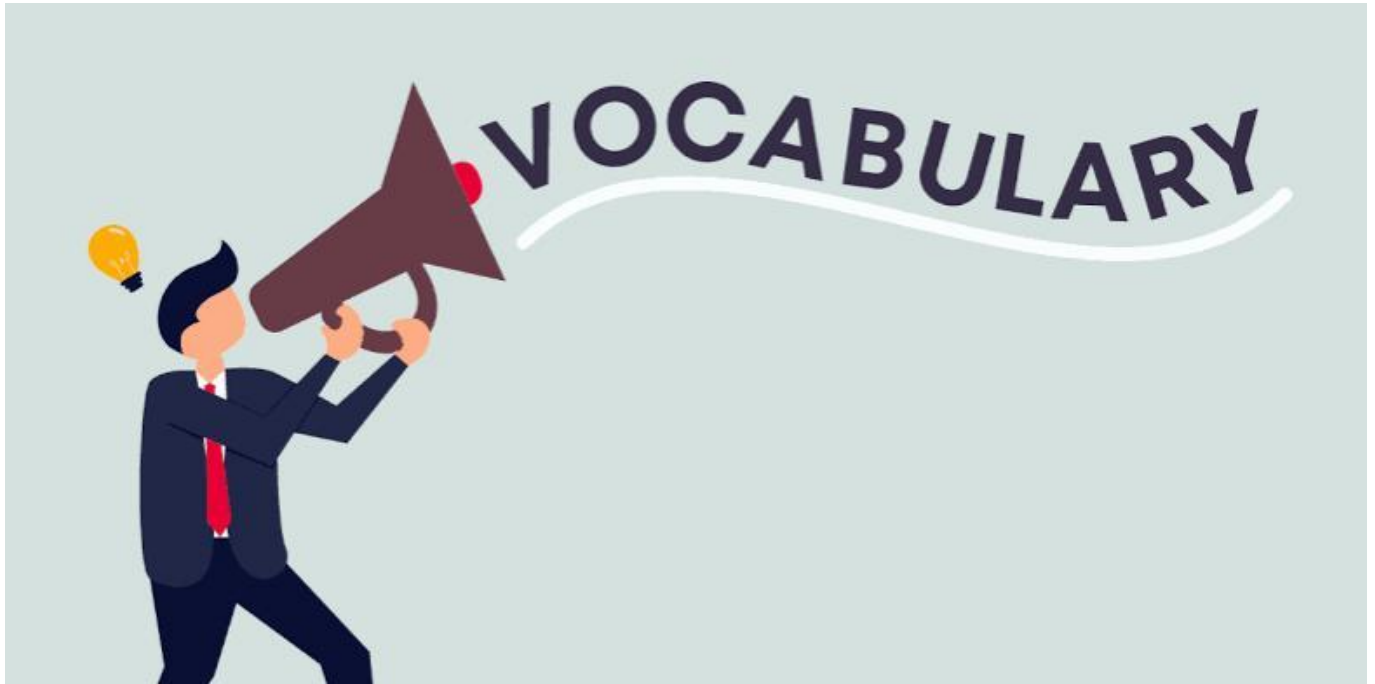
Decodable texts: Provide students with Desirable texts that match their phonic skills.



Vocabulary:

Effective Teaching Practices:-

- 1.Explicit Instruction:-** Teach Vocabulary explicitly , providing clear definitions and examples.
- 2.Contextual Learning:-**Teach Vocabulary in context, curing arthentic texts and materials.
- 3.Repetation and Review:-** Review vocabulary regularly, using spaced reputation to Reinforce Learning.
- 4.Multi Sensory Instruction:-** Use multi sensory approaches, such as visual,auditory and kinesthetic learning.



5. Student Centered Learning:- Encourage Student Centered learning, using activities such as Vocabulary, journals and word sorts.

Understanding Vocabulary:-

1. ***Contextual learning*:** Learn words in context, rather than as isolated definitions.
2. ***Root words*:** Identify root words and prefixes to decipher unfamiliar words.
3. ***Word families*:** Group words by families (e.g., -tion, -ment, -ful) to expand vocabulary.

Vocabulary Acquisition Strategies:-

1. ***Reading widely*:** Expose yourself to various texts, genres, and authors.
2. ***Keeping a vocabulary notebook*:** Record new words and review them regularly.
3. ***Flashcards*:** Create physical or digital flashcards to reinforce learning.

4. ***Word games and puzzles***: Engage in activities like crosswords, word searches, and Scrabble.

5. ***Mnemonics***: Use associations, acronyms, or rhymes to aid memory.



Effective Vocabulary Practice

1. ***Active recall***: Test yourself regularly on new vocabulary.

2. ***Spaced repetition***: Review words at increasingly longer intervals.

3. ***Vocabulary in context***: Use new words in sentences or short paragraphs.

4. ***Discussion and conversation***: Engage in conversations to apply vocabulary in context.

Review and Reflection

1. ***Regular review***: Schedule regular review sessions to reinforce learning.
2. ***Reflect on progress***: Track your progress, identify areas for improvement, and adjust your strategy.

★ By incorporating these strategies into your daily routine, you'll be well on your way to expanding your vocabulary and enhancing your communication skills.

Technology Integration:-

1. **Vocabulary Apps**:- Use Vocabulary apps such as Quizlet and Quiz apps.
2. **Online Flashcards**:- Create online Flashcard, using tools such as Anki and Study Blue.
3. **Digital Vocabulary Notebooks**:- Encourage student's to keep digital Vocabulary notebook, using tools such as Evernote and OneNote.
4. **Interactive Games**:- Use interactive games, such as Vocabulary Bingo and word searches.
5. **Virtual Field Trips**: Take Virtual field trips, using tools and Google Expeditions and Discover.

Assessment and Feedback:-

Formative Assessment: Use formative assessment, such as quizzes and class discussions.

Summative Assessment: Use Summative assessment, such as unit test and final exams.

Feedback:- Provide feedback, using techniques such as peer review and self assessment.

Vocabulary Quizzes:- Use Vocabulary Quizzes such as online quizzes and paper based quizzes.

Portfolio Assessments:- Use portfolio Assessments, evaluate student learning one-time.

FLN COMPREHENSIVE STRATEGIES :

The NIPUN Bharat FLN mission is being implemented through a comprehensive approach that includes the following key strategies.

Teacher training and capacity building

- >Focus on Early Childhood Education (ECCE)
- > Community Engagement >Monitoring and Evaluation
- > And Ensuring Multilingualism

Teacher Training and Capacity Building:-

Objective: Developing skills among the learners to amalgamate their outside school experience in their classroom learning to attain foundational literacy and numerally in a better way.

How to improve FLN Training:-

Conduct a needs assessment of School leaders, and schools FLN programs to develop the most relevant forms of professional learning Design develop and implement context Specific learning offering for school leaders research. schools leaders take up of professional learning and the effects these forms of support.

How do you become an effective teacher

Literacy teachers should offer specific actionable and timely feedback to help teachers refine their instructional practicer. Example: After observing a lesson meet with the teacher to discuss your observations. Focus on specific areas of strength and areas for growth, providing clear suggestions for improvement.

Early Childhood Care and Education (ECCE)

Foundational Literacy and Numeracy focuses on early childhood care education to build a strong foundation for learning. ECC spans the first six years of child life and focuses on the cognitive, language, literacy, socio emotions physical creative ones cultural development. It plays a pivotal role as step zero in advancing foundational literacy.

Here a comprehensive list of Foundational Literacy and Numeracy focused on Early Childhood Care and Education **literacy**

- Phonological awareness
- Alphabet knowledge
- Phonics
- Recordable texts
- Sight words

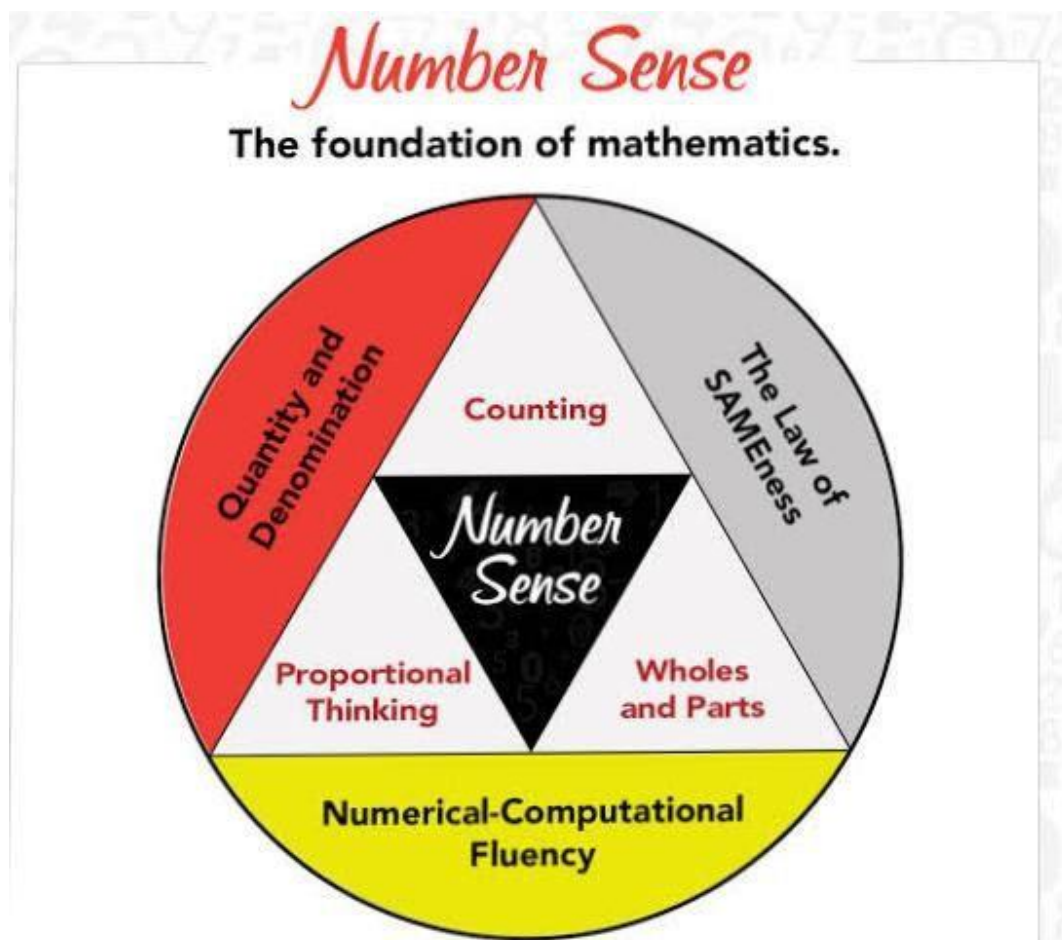


Vocabulary building

➤ Comprehension strategies

Numeracy

➤ Number sense



➤ Counting

➤ Basic additions and subtraction

➤ Shapes and patterns

➤ Measurement

➤ Sorting and categorizing

Basic fractions

ECCE specific FLN vocabulary

➤ Play based learning



- Emergent literacy
- Emergent numeracy
- Learning centers
- Circle time
- Story telling
- Rhymes and rhymes

Teaching strategies

- Modelling
- Guided Practice
- Independence practices
- Differentiated Instruction
- Technology Integration
- Small group Instruction
- One on one Instruction

Assessment and Progress Monitoring

- Observation
- Running records
- Phonic assessment
- Numeric assessment
- Progress monitoring
- Formative assessment
- ☐ Summative assessment

Learning Environment

- Print rich Environment
- World Wall
- Number Line
- Learning Centers
- Classroom Library
- Technology Station
- Collaborative Learning Space



B. Building numeracy

Numeracy in FLN refers to the ability to perform basic math operation such as counting, addition and subtraction

Early Math concepts that are part of foundational literacy in numeracy

Early Math concepts:-

1.Numeracy

Number sense:

- Counting (1-100)
- Number Recognition (1-20)
- Basic Number Concepts (Before and after between)

2. Addition and subtraction

- Basic Addition facts (eg: $1+1 = 2$)
- Basic Subtraction facts ($2-1=1$)
- Using Number Lines and Counting blocks

3. Shapes and patterns

- Recognizing basic shapes
E.g.: (Δ , %,)
- Creating and Extending Patterns using shapes and colours.

4. Measurement

- Comparing lengths(longer/shorter)
- Comparing weight (heavier/lighter)

- Introducing basic measurement unit (e.g:
inches, centimeters)

5 .Sorting and categorizing

- Sorting objects by shapes colours and size
- Categorizing objects into groups (eg: animals, toys)

6. Time sequencing

- India tourism basic time concepts (eg: days of the week, months) 😊
- Sequencing events (eg: morning ,afternoon, evening)

7. Money and financials

- Introducing basic money concepts (eg: coins
, bills)
- Basic financial literacy example savings and spending)
 - ❖ These Early math concepts lay the foundation and for the future math skills and or essential for building a strong foundation in numeracy .



Joyful learning ideas

1. Math games

- What's missing (number recognition)
- Shape Bingo (shape recognition)
- Math war (basic addition and subtraction)
- Hands on activities play dough creations shapes and patterns
- Sensory bins (measurement and sorting)
- Math themed crafts (number recognition and shape)

2. Story Telling and Rhymes

- Math themed stories (eg: Five on the table)
- Number rhymes (eg: three little butterflies)
- Shape themed songs (e.g the shape song)

3. Real- world applications

- Measuring ingredients for a recipe
- Counting money
- Telling time

4. Technology integration

- Math apps (e.g math games or khan academy kids)
- Online math games(e.g : coolmath, meta play ground)
- Digital math worksheets (e.g: math drills)
- ❖ By incorporating these early math concepts and joyful learning ideas. We can create a engaging and interaction FLN program that sets students for success in math and literacy .

C. Learning by doing: Hands-on Activities for Literacy and Numeracy



Learning by doing hands on activities for literacy and numeracy in foundational literacy and numeracy (FLN) .

Literacy Hands on Activities

1.Word building : use

magnetic letters or letter tiles to build simple words

2.Rhyming Bingo : create Bingo cards with pictures or words that rhyme

3.Story sequencing: cut out pictures from a story and mix them up. How students put the pictures in order and retell the story.

4.Phonic Scavenger Hunt : Hide words around the classrooms that match a specific phonics pattern. Have student find the words all the read them aloud

5.Literacy centers: Set up centers with different literacy activities a such wordbuilding,reading,allowed,writing,sentences and phone games .

Numeracy Hands on Activities:

1.Number Tracing: shaving cream or sand to training number

2.Counting Games: Hide set of numbers around the classroom and have students find them in order. play a counting game where students take turns counting objects

3.Shape patterns: Create a pattern using shapes eg:-(Square,circle, triangle) have the students continue the pattern and create their own



4.Measurement stations: set up stations with different measurement activities such as measuring length using blocks or rulers, measuring, weights, using a balance measuring capacities and using cups or jugs

5. Math Bingo: Create Bingo cards with numbers or math problems call out the numbers or problems and have students mark the corresponding answers

Integrated Literacy and Numeracy Hands on Activities

1. Story Problems: create story problems that incorporate Literacy and Numeracy skills (example if I have five pencils and I give 2 to my friend, how many pencils do I have left. Have students read the story problem and solve the math problem.

2.Literacy Math centers: set the

centers that integrate Literacy and Numeracy skills such as center where students read a story and the complete a math activity related to the story .

3. Read World Applications: Use real world examples to integrate literacy and a numeracy skills such as reading a recipe and measuring out ingredients or reading a map and using numeracy skills to navigate.

D. Classroom Practice for Foundational Success Integration and Play Based methods

1.Classroom-practices:classroom-practices includes classroom management pedagogy learning activities as well as students as engagement in learning and use of instruction time .

2.Foundation classroom: Foundational

learning is basic literacy and transferable skills that are the building blocks for a life learning without foundational learning Students often fail to thrive later in school or when they join the work ,force.

Literacy Practices for Effective Learning and Teaching for Foundational Classroom

Literacy Practices

1.Phonic games: board games card games or outline games focusing on phonic skills.



- 2. Word Building:** Using magnetic letters, letter tiles or play dough to build words
- 3. Reading Aloud:** Students take turns reading Aloud to peer or suftered animals
- 4. Story telling:** Using puppets or dolls to tell stories
- 5. Literacy centres:** Rotating situations for reading and writing and word work
- 6. Rhyming bingo:** identify rhymes words through Bingo
- 7. Savage hunts:** finding words or letters in the classroom or outdoor

Numeracy Practice

- 1.Number Line:** Interactive number lines for counting and basic addition and subtraction.
- 2.Math Bingo:-** Identifying numbers and math problems through Bingo

- 3.Shape Sorting:** Sorting shapes by attribute eg: colour and size.
- 4.Counting games:** Hide and Seek number games.
- 5.Measurement Stations:** Exploring measurements using blocks rules or cups
- 6.Pattern Blocks:** Creating and Extending patterns.
- 7.Math Scavenger Hunts:** Finding real world example of math concepts.

Integrated literacy and numerical practices

- 1.Story Problem:** Solving math problems within literacy contexts
- 2.Math Literacy centers:** Combining literacy and numeracy skills.
- 3.Real world Applications:** Using everyday objects to demonstrate math concepts
- 4.STEM Activities:** Integrating Science technology engineering and math.
- 5.Project:** based learning long- term project incorporating literacy and Numeracy

Interactive and Play Based Methods



RAISING STARS

Play-Based Learning

Self-Chosen

The child chooses the type of play, how they will complete the play and the length of time spent on a particular activity. As an educator, you may provide a prompt for play, but the child takes direction from this point onwards.





Enjoyable

To keep children excited about their learning development, you should ensure that they're having fun when playing.

Unstructured

Children direct the play themselves, motivated by their own interests. The child can explore as they please, using whatever objects or prompts they find within the process of their play.





Process-Orientated

The process of play should be at the centre of the child's learning development, not the specific learning objective. In proper play-based learning environments, the objective will find the child.

Make Believe

Play targets child imagination and encourages them to think creatively.



- 1.Role playing:** Stimulating real-life scenarios to practice literacy in numeracy
- 2.Dramatic play:** using props and costumes to retell stories
- 3.Math Dramatization:** Acting out math problems
- 4.Literacy-Richplay:**incorporating literacy into play areas (e.g Labels signs)
- 5.Outdoor Learning:** Using nature to explore literacy and numeracy concept

Interactive strategies:

- 1.Think-Pair-Share:**Collaborative problem solving
- 2.Jigsaw reading:** Students read and summarize texts in small groups.
- 3.Number Takes:** Discussing math concepts and strategies
- 4.Literacy Circles:** Small-group reading discussion
- 5.Math Games:** Competitive and cooperative games

Technology Integrations

- Educational Apps:** Literacy and Numeracy apps eg: ABC mouse, Khan academy kids .
- Online Games:** Websites offering, offering interactive literacy and numeracy games.
- Digital whiteboards:** interactive lessons and activities.
- Ebooks:** interactive digital books
- Learning Management System Online platforms for lesson planning and assessment.

Building Blocks for Math Success

5. Logic

All cats have 4 legs.
If Fido has 4 legs,
then is Fido a cat?

4. Multiplication Facts

Quick recall
 $6 \times 7 = ?$

3. Addition Facts

Quick recall
 $5 + 8 = ?$

2. Place Value

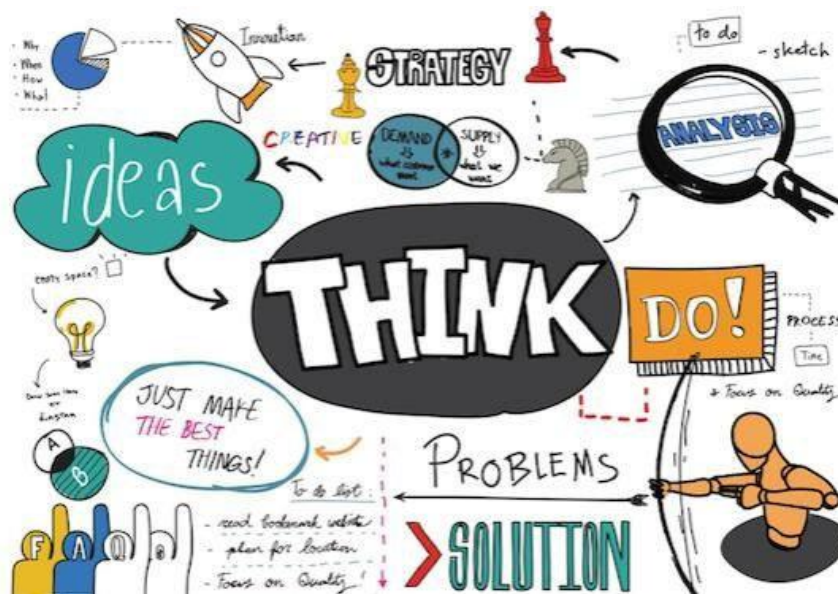
1's, 10's, 100's, etc.
Carrying, Borrowing

1. Number Value

How many *is* 7?
Sorting, Counting

These interactive and play based methods create engaging learning environments fostering foundational success in literacy and numeracy.

E. Making learning Visible : Encouraging early grade Reading and Writing. **Making learning visible** is a teaching approach that can help students understanding their own thinking process and improve their learning it can also help teachers tailor to lessons to student needs and improve student achievement .



Objectives:

The objectives of making the learning visible in the context of foundational and Literacy and Numeracy include :-

- **Helping students understand expectations display:** Display learning intentions in the classroom and use language that is accessible to students.
- **Building on existing knowledge:** Relate learning intentions to what students already know
- **Classifying expectations:** Use non examples to help students understand the specific behaviour or outcomes associated with the learning intentions
- **Setting success criteria:** Develop success criteria that describe what success looks like and help students understand the standards
- **Providing feedback:** Regularly provide feedback to students about their progress towards the learning intention
- **Encouraging Critical thinking visible learning prompts:** Encourage children to question, analyse and explore ideas.

Observational strategies

- **Learning walks:** Regularly observe students during lessons to identify strengths and areas for improvement.

➤ **One On One Conference:** Meet with students to discuss progress set goals and provide feedback.

➤ **Peer observation:** Encourage students to observe and learn from each other

Documentation strategies

➤ **Learning Journals:** Students record progress reflect on learning and set goals

➤ **portfolio:** collect students work samples, annotations and reflections.

➤ **Classroom Displays:** Show case students work, charts and graphs.

➤ **Digital portfolios:** Utilize online platform(e.g.: seesaw, Google classroom)for documentation.

Visibility Strategies

➤ **Learning Goals:** Display clear,achievable goals for students.

➤ **Success Criteria:** Outline expected learning outcomes.

➤ **Feedback:** Regularly provide constructive feedback.

➤ **Self-Assessment:** Encourage student evaluate own learning.


➤ **Parent Teacher Conferences:** Share student progress and involve parents.

Technology Integration

Learning Management System:(LMS) Utilize platforms like Canvas blackboard or Google classroom.

➤ **Digital Tool:** Leverage apps [e.g:Kahoot, Quizlet,] for interactive learning.

➤ **Blogs:** Encourage students to share learning reflection.

➤ **Video  Recording:**Record lessons, presentations or student reflections.

Data Driver Instruction

➤ **Formative Assessment:** Regularly evaluate student progress .

➤ **Summative Assessment:** Evaluate learning at the end of units or terms .

➤ **Data Analysis:** Use assessment data to inform instruction .

➤ **Differentiation:** Tailor instructions to meet diverse,student needs.

Collaborative Practices

➤ **Professional Learning Communication :(PLC)** Share best practices with colleagues .

➤ **Peer Coaching:** Collaborate with peer for instructional support.

➤ **Students Lead Conferences:** Involve students in learning conference.

By implementing these strategies, educators can make learning visible, enhancing teaching learners and assessment practices in Foundational literacy and Numeracy.

Making learning visible for foundation literacy and Numeric involves strategies to observe document and show case students learning.

Observation strategies learning weeks regularly observe students strengths and areas for improvement .

Conclusion:

- **Student engagement**
- **Diverse learning styles**
- **Command over the enter pupil physical and mental disposition**
- **Subject related injunction**
- **Anecdotes to make learning less boredom**
- **Improvised micro verbal quizing**
- **Recapitulation**
- **final quick revision on topic presented**
- **Homework if necessary**
- **Appropriate assessment**