



# Texas School for the Blind and Visually Impaired Outreach Programs

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Coffee Hour  
The Importance of Early Numeracy

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## Rationale

- The skills needed to develop early numeracy and early literacy skills are interwoven.

## What is Numeracy

- Numeracy is the ability to understand and work with numbers and to apply math concepts in all areas of life.
- Numeracy is a term that refers to all the mathematical skills students need to learn.

## Early Literacy

Literacy begins at birth and continues as a young child develops.

- The ability to communicate
- Sensory awareness
- Visual and/or tactual discrimination skills
- An awareness of books, print or braille, and their purpose

## Why Teach Early Numeracy

- Tactile learners need specially designed instruction for numeracy
- Begins way before formal schooling
- Strengthened through early childhood via day-to-day activities including PLAY
- Children under the age of 5 have the best opportunity and ability to absorb basic numeracy skills

## Texas Pre-K Guidelines

The core of any early education mathematics curriculum should focus on:

- developing young children's ability to problem solve
- developing capacity to ask thoughtful questions
- recognizing problems in their environment throughout the entire preschool day
- using mathematical reasoning with familiar materials in the classroom

- using concrete materials that are developmentally appropriate to manipulate
- incorporating math concepts and instruction throughout the entire preschool day

### **Early Numeracy Includes**

- Pattern recognition and creation
- Sorting and classifying
- Numbers and operations
- Geometry and spatial sense
- Measurement

### **Patterns**

- Pattern recognition and creation includes knowledge about specifically repeated sequences of objects, pictures, numbers, letters, sounds, actions, or events.
- Understanding patterns helps children make predictions about what comes next.

### **Pattern Activities**

Slide shows a two-column chart with ideas for activities in each column.

Families

- Nursery rhymes
- Songs with movements
- Predictable daily routines
- Build patterns with food

Teachers

- Real objects for building patterns
- Use patterns within activities
- Calendar systems

### **Sorting and Classifying**

- Sorting and classifying includes recognizing how things are the same or different and separating objects into groups by features (size, shape, color, texture).
- Understanding how to sort and classify helps children develop logical reasoning skills

### **Sorting Activities**

Slide shows a two-column chart with ideas for activities in each column.

Families

- Putting away toys, laundry, or silverware in designated spaces
- Exploring and comparing items
- Infusing descriptive language throughout the day

Teachers

- Organization systems within the classroom
- Sorting games with objects, textures, sizes, shapes, or words

## Numbers and Operations

- Numbers and operations includes rote counting, 1:1 correspondence, counting on, adding to and taking away, and numeral identification.
- Understanding about numbers and operations is an underlying foundation for future math skill development.

## Number Activities

Slide shows a two-column chart with ideas for activities in each column.

Families

- Counting songs
- Setting the table
- Counting in daily activities
- Cooking and playtime
- Adding and identifying numbers to/in the environment

Teachers

- Circle Time
- Passing out snacks or materials
- Counting on in school activities (one more)
- Building sets of objects
- Reading and/or making number books

## Geometry and Spatial Sense

- Geometry refers to knowledge about shapes, size, position, and direction.
- Spatial sense is an awareness of self in relation to people and objects around you.

## Geometry Activities

Slide shows a two-column chart with ideas for activities in each column.

Families

- Explore and name shapes in everyday environments
- Use directional and positional language during routines
- Obstacle courses, movement songs

Teachers

- Match, sort, and name real objects by shape
- Make shapes using various materials
- Trace around real objects
- Movement songs and games

## Measurement

- Measurement refers to finding and comparing the length, height, and weight of objects.
- Measurement can also include concepts about time, area, and volume.

## Measurement Activities

Slide shows a two-column chart with ideas for activities in each column.

#### Families

- Simple cooking activities
- Infuse comparison language
- Filling and emptying containers

#### Teachers

- Compare objects by attributes such as length, weight, or size
- Non-standard units of measurement
- Line up by height order

### Resources for Evaluation

- [EVALS](#) Beginning Concepts
- [The Oregon Project](#)
- [Texas 2 STEPS](#) Spatial Concepts Section
- [The Brigance: Early Childhood](#)

### Resources for Instruction

- [Super Duper Handy Handouts: Math Around the Home #153](#)
- [Building on Patterns](#)
- [Lots of Dots 1, 2, 3](#)
- [Little Texans, Big Futures](#)
- [The Oregon Project](#)
- [Texas 2 STEPS](#)
- [The Brigance: Early Childhood](#)

### Contact Us

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**Thank you for joining us!**