Course 7: An Introduction to UEB Math/Science for Pre-Kindergarten – 1<sup>st</sup> Grade Students and Strategies for Supporting Math Learning

## Lesson 1: Numbers and Linear Problems

- 1.1 Participants will be able to read and write the following symbols:
  - Numbers from 0-120
  - Mathematical comma (7,8,9)
  - Plus and minus signs (+,-)
  - Equals sign, greater than sign, less than sign (=, >, <)
  - Visible space and question mark used as omission symbols in mathematics
- 1.2 Participants will be able to number math problems
- 1.3 Participants will be able to read and write linear problems

# Lesson 2: More Linear Problems, Word Problems, and Additional Signs of Omission

- 2.1 Participants will be able to read and write linear math problems using the dash, underscore, or shape to represent a missing number, sign of operation, or sign of comparison
- 2.2 Read and write math word problems

#### Lesson 3: Multiple Choice Problems and Spatial Problems

- 3.1 Participants will be able to read and write tally marks
- 3.2 Participants will be able to read and write problems with multiple choice answers
- 3.3 Participants will be able to read and write spatial problems

Lesson 4: Formatting Materials for Students in the Early Grades

- 4.1 Participants will be able to locate and use formatting resources
- 4.2 Participants will be able to format the following:
  - Centered headings
  - Braille page numbers
  - Directions
  - Problems
- 4.3 Participants will be able to make decisions on when to use manipulatives instead of simple tactile graphics

## Lesson 5: Working with the Educational Team

- 5.1 Participants will be able to describe their role as a TSVI working with students who are in PK-1 education
- 5.2 Participants will be able to identify ways they, as the TSVI, can support general education system
- 5.3 Participants will be able to list ways they can support the paraprofessional to do his/her job successfully
- 5.4 Participants will be able determine when to prepare a teacher reference sheet and what to include

Lesson 6: Supporting the Student in Learning UEB Math/Science and Math Concepts

- 6.1 Participants will be able to describe the importance of pre-teaching UEB Math/Science symbols
- 6.2 Participants will be able to locate and use resources for teaching math concepts
- 6.3 Participants will be able to identify and use hands-on materials and manipulatives to support student learning

## Lesson 7: Family Engagement to Support the Child's Success in Math

- 7.1 Participants will be able to support the family in creating a positive environment for learning
- 7.2 Participants will be able to describe strategies to use when introducing family members to the UEB Math/Science concepts
- 7.3 Participants will be able to identify typical routines that support a child's learning of math concepts
- 7.4 Participants will be able to explain activities outside of the home that families can take advantage of to increase the child's learning of math concepts
- 7.5 Participants will be able to develop ideas for activities to send home for families to complete together
- 7.6 Participants will be able to provide ideas to families for supporting their child in completing math homework