Minnesota State University Moorhead

MATH 507: Add+VantageMR® I: Math Recovery Strategies for the Classroom

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Add+VantageMR® (AVMR): Math Recovery® Strategies for Elementary Classrooms 1 includes dynamic, diagnostic, individual assessments in number words and numerals, structuring numbers, and addition and subtraction strategies. The assessment, data collecting, and teaching tools accelerate the educator's ability to recognize the students' current levels of numeracy understanding to make data-driven instructional decisions. AVMR is beneficial for anyone working or supervising others in mathematics. It is most appropriate for pre-kindergarten through elementary educators.

B. COURSE EFFECTIVE DATES: 02/02/2019 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Assess elementary age students in Number Words and Numerals, Structuring Numbers 1-20, and Addition & Subtraction.
2. Analyze the models within the Learning Framework in Number to accurately analyze the child¿s current understanding and determine the instruction needed to help the child progress through the Levels or Constructs.
3. Using knowledge of the child, mathematical strategy development in number and operations, mathematical properties, and research, teachers respond effectively to support a student¿s growth as a mathematician.
4. Reflect on their practices and experiences with constructivist teaching, and refine their techniques to better meet the learning needs of the students.
5. Study a research-based learning trajectory for children¿s development of whole number operations. These include guiding principles for classroom teaching, topics of arithmetic learning, and dimensions of mathematizing to advance student thinking.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted