Background
Research shows that students often score low on mathematic exams because:
- they do not possess the language skills to understand the written math problems, and
- they do not realize the relevancy of mathematics; therefore, they do not recognize its importance.

Focus
- Emphasize math comprehension to help teachers discover ways to combine literacy with computation and numeration in mathematics lessons.
- Present the concept of “journaling” to the mathematics teachers, a concept that will allow their students to develop a better grasp of the communications of mathematics.
- Presentations and training that will help the mathematics teacher establish a stronger relevancy between mathematics and the “real world” by providing the teachers with equipment and training that will allow them to “go beyond the classroom” and use real-world applications of mathematics.

Objectives
- Develop a higher-level knowledge of solving real-world application problems.
- Increase ability to connect mathematical concepts with real-world applications.
- Develop strategies for teaching math vocabulary and reading comprehension of math problems.
Objectives

- Create assessment instruments to measure student achievement in the areas of math dealing with real-world applications.
- Students in the participants’ schools will show improvement in their ability to link the study of mathematics to the world outside of the classroom as measured by a teacher-made pre/post-test.

Objectives

- Professional development strategies, specific workshop activities, and participant findings will be shared with other Oklahoma school districts via the MATH-ESE 3D Tool-Kit on the OPSU web-site.

Benefits of the Workshop

- Lesson plans aligned to P.A.S.S. that integrate research-based curriculum and/or practices.
- Increased ability to analyze students’ achievement data.
- NCTM membership
- EOI Test Preparation
- Developing a Plan of Implementation

Benefits of the Workshop

- Specialized training dealing with the creation and use of lesson plans incorporating real-world applications. Topics will include:
  - Measurement
  - Probability
  - Algebra
  - Geometry
  - Reading Comprehension of Math Problems
  - Vocabulary and Journaling

Benefits of the Workshop

- Pocket PC
- Digital Camera
- Manipulatives
- Networking
- Stipends!

Benefits of the Workshop

- Lunch
- Breaks
- Bathrooms
- Copies
- Printing
**Necessary Information & Requirements**

- Attendance
- Daily Journaling and Reflection
- One lesson plan
- Pre/Post Test

**Schedule**

- May 27th-31st and June 7th
- Follow up dates: Oct. 25th and Nov. 22nd
- All meetings — 9:00AM-5:00PM
- All sessions except Saturday, May 31st will be held on OPSU Campus
- Saturday, May 31st meeting will be in the Guymon Classroom

**Detailed Schedule**

Today — Tuesday, May 27th

- Concept Map Pre-Test
- Orientation
- Instructions about use of Camera and PDA
- Lunch
- Math-ESE 3D Pre-Test
- Reading Comprehension — Dr. Hodges
- Daily Journaling and Evaluation

** Detailed Schedule **

Wednesday — May 28th

- Journaling, Vocabulary, Graphic Organizers — Mihelic and E. Stewart — HMH 127
- Lunch
- Measurement — Lyle and Peterson
  - Elementary — HMH 109 — Peterson
  - Secondary — HMH 108 — Lyle
- Daily Journaling and Evaluation — HMH 127

** Detailed Schedule **

Thursday, May 29th

- Probability — Elementary — Peterson — HMH 109
- Geometry — Secondary — Lyle — HMH 108
- Lunch
- Data Analysis — Elementary — Peterson — HMH 109
- Algebra — Secondary — Lyle — HMH 108
- EOI Test Preparation — All — HMH 110
- Daily Journaling and Evaluation — HMH 127

** Detailed Schedule **

Friday, May 30th

- Probability — Secondary — Peterson — HMH 109
- Geometry — Elementary — Lyle — HMH 108
- Lunch
- Data Analysis — Secondary — Peterson — HMH 109
- Algebra — Elementary — Lyle — HMH 108
- Developing a Plan of Implementation — All — E. Stewart — HMH 127
- Daily Journaling and Evaluation — HMH 127
Saturday — May 31st—Guymon Classroom
Math-Ese 3D Post Test
Presentation of Sample Lessons — Nancy Roberts
Orientation for Field Experience
Lunch
Field Experience
Daily Journaling and Evaluation — Guymon Classroom

Saturday, June 7th — OPSU Campus — HMH 127
Presentation of planned lessons
Final Journal exercise and seminar evaluation

Follow-up Dates
October 25 and November 22
Presentation of Lessons, pre/post test, data, and reflection
All materials must be submitted one week prior to date of presentation

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