Proposal Summary of “Shaping the Delivery of Middle School Mathematics Curriculum through Production of Original Video”

1. Overview - Objectives
Participants will:

- Walk through the process experienced by an expert panel of Texas Middle School Teachers that was used to create real world scenarios that are mathematically rich and used as the basis of creating PBS-quality video

- receive information on a proven process that has been successful for districts receiving millions in technology awards; used by a consortium of 6 school districts to build a technology rich middle school mathematics curriculum that is standards based;

- articulate the process of consortium building and developmental stages of “break-through thinking” in designing a customized multi-media, Internet delivered curriculum for diverse student populations for middle school mathematics

- have information as how to access the eMath Project with 30 math modules as funded by a $1.8 million TIE Grant from the Texas Education Agency; how to participate in on-going research of the impact of emerging technology in mathematics education

- view and interact with Professional Development module and experience one student module with its interactive, video, gaming components

- experience one teacher’s journey in break-through thinking on developing the mathematics modules for grades 6-8

2. Outline of Presentation
- Review 3 years of planning, goal setting, defining needs by 6 school districts
- Discussion of teacher input, curriculum design, break-through thinking in process of designing the curriculum;
- Outline of the design of the web-based content to support the original video clips used in the modules with a thematic and problems based approach
- Experience sequences of the video that are teen-interest based on problems that both this age group and society must use mathematics

Audience will experience photos of teachers in the development process, see examples of modules that teachers have developed, view a video clips of administrators discussing the support given to the project; experience a module
(as though they are students) to solve the posed problem and work toward solutions with web-based and video sequences.

3. Research Based — Because this project is cutting edge of emerging technology curriculum development, an Expert Panel of nationally known math professors was engaged through TEXAS A&M University to write a “White Paper” on best practices in middle school technology initiatives in mathematics. The research is embedded in a staff development module.

4. Presenter Qualifications—In past 9 years has received funds for nearly $22 million for technology initiatives for consortiums of Texas schools, all the while serving as assistant superintendent for curriculum or acting as project director. Served on the 1999-01 Texas Education Agency Educational Technology Advisory Committee.

➢ Workshop appropriate because it represents a major effort to integrate emerging technologies including a major use of original video into the middle school math program; uses teacher expertise in designing the content and delivery system
➢ Major Presenter has given presentations to local, state, national, international audiences on technology, school reform, staff development for past 15 years