Synopsis of Study:

The study is part of a Texas Higher Education Coordinating MSTTPA Cycle 3.1 Master Teacher Grant. Participants are teachers with at least two years of teaching experience from low performing campuses as defined by the Texas Education Agency. They will be taught content and pedagogy classes to strength their teaching and mentoring skills to obtain a Master Teacher’s certification. They will be given a pre- and post content test, case studies, and a survey at the completion of the course to determine their progress toward Master Teacher’s certification and Master’s of Education degree and to determine if treatment is being successful in improving content, pedagogical, and cognitive knowledge. Students will also use discussion groups, blogs, and wiki’s and the information will determine if students improve in their understanding of math content, pedagogy, and cognitive understanding. Study question addressed include:

1. Academy Participants from low performing campuses as defined by the Texas Education Agency (TEA) will obtain advanced educational recognition of a Master Teacher certification and Master’s of Education as determined by the number obtaining Master Teacher certification and Master’s of Education at the completion of the Academy.

3. Academy Participants will develop communities of learners to study issues such as mentoring/induction strategies, effective use of technology in the classroom, how assessing impacts instructions, problem based learning, and others issues as needed. Books relating to the needs of participants will be studied in communities of learners. Wikis, blogs, and twittering will be used be used to communicate and collaborate. On-line activity will be monitored to determine successful exchange of ideas.

4. Academy Participants will develop Problem Based Instructional (PBI) units integrating mathematics, science and technology in real world context. Success will be determined by Academy participants successfully constructing websites (using wikis and Web 2.0 technology) with accessible and detailed PBI unit for EC-4 classrooms and by tracking usage of websites.

5. Academy Participants will participate in Learning Academy Seminars to work on their personal and district goals to strengthen teaching and mentoring/induction capabilities. Success will be determined by participants successfully completing their personal project.