# Strengthening America's Competitiveness Through Math Instruction – Task 6: Field Test of the Teacher Training Initiative

Tracking #:

## Supporting Statement for Request for OMB Approval of Data Collection

### Part B: Collection of Information Employing Statistical Methods

**Prepared for:** U.S. Department of Education Contract ED

#### Submitted to:

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**Date Submitted:** 

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# Introduction

This initiative involves three Adult Numeracy Instruction (ANI) Professional Development Institutes. Twenty teachers and ten program administrators from ten adult education programs from each of two states will participate in a field test of the professional development Institutes. The goals of the institutes are to:

- Increase and deepen mathematics content knowledge among teacher and program administrator participants;
- Increase the repertoire of instructional skills among teachers working with adults in ABE, pre-GED, and GED classes;
- Increase the ability of program administrators to provide support to teachers to enable them to teach effectively;
- Increase state capacity to ensure quality instruction in local programs.

After each of two states is selected to have teachers and program administrators participate in the professional development, ANI staff will work with a representative from the state's professional development staff to plan how the project will contribute to the state's capacity to ensure quality instruction, to recruit teachers and administrators from local programs to participate in he professional development, and to plan activities for the state to build on the ANI project in the following year.

The study will involve the administration of the following instruments:

- Pre/Post surveys of participating teachers and program administrators;
- Pre/Post administration of a cognitive assessment to participating teachers, and
- Post-professional development interviews with participating teachers.

## **B.** Collection of Information Employing Statistical Methods

This submission requests clearance for surveys and teacher cognitive assessments to be used in the Strengthening America's Competitiveness Through Math Instruction – Task 6: Field Test the Teacher Training Initiative. This study is designed to collect information on changes in teacher knowledge and repertoire of instructional strategies after receiving a new professional development program. The survey and cognitive assessment will be administered to all participants during the professional development sessions, and so no statistical sampling or imputation will be used in the study. However, this document provides relevant information about the data collection procedures.

### **B.1. Potential Respondent Universe**

For the purposes of this study, the universe for data collection consists of two teachers and the program administrator from ten adult education programs in two states who participate in the professional development sessions for a total of 40 teachers and 20 administrators.

### **B.2. Information Collection Procedures**

The primary procedure for collecting information will be an assessment of cognitive learning and a survey for each teacher and a survey for each administrator that participates in the professional development sessions. Each of the instruments will be completed twice. Time will be set aside during the Institutes for the purpose of having participants complete the survey and (for teachers) the cognitive assessment. Participants will complete the materials during that time. The contractor pre-tested the instruments during the winter of 2009 and confirmed that on average, the instruments each took 20 minutes to complete. There is no requirement for respondents to look up information.

Respondents will complete the assessment and survey using paper and pencil. MPR researchers will input the survey responses into a database, which will be stored on a secure server and will be available to project staff for subsequent analysis. There are no plans to release a data file containing survey responses.

### B.3. Methods for Maximizing Response Rates

Because this survey will be distributed during the professional development sessions, we expect a response rate of 100 percent. In addition, we will take the following steps to ensure that a very high response rate for all items, we will keep the survey and the cognitive assessment as short and easy to complete as possible, while ensuring collection of all necessary information.

### B.4. Tests of Procedures and Methods

Most of the instruments developed for this program are based upon previously validated surveys. Using previously developed surveys and assessments maximizing efficiency by reducing the need to conduct extensive pilot tests of the instruments under use.

One important goal in the development of this survey was to create an instrument that would be clear, accessible, and quick to complete. To ensure that teachers complete the entire survey in the designated time, it was important to keep it simple and short. For this reason, almost all of the questions contain fixed choice responses.

The teacher survey is based upon previously developed surveys of teacher attitudes and practices, including the Teachers Investigating Adult Numeracy (TIAN) questionnaire, from a project funded by the National Science Foundation (Grant No. ESI-0455610); and the 2006 Local Systemic Change Teacher Questionnaire, from Horizon Research, Inc).

The cognitive assessment items were drawn from the Teacher Knowledge Assessment System (TKAS) from the Learning Mathematics for Teaching Project at the University of Michigan. The forms were created by LMT-trained professionals at TERC, and a table describing the summary statistics is presented along with the instruments.

### B.5. Individuals Responsible for Designing and Conducting the Study

This study is being conducted by the U.S. Department of Education, Office of Vocational and Adult Education. The Department's contractor is MPR Associates, Inc. Contact information for principal professional staff of the contractor assigned to the study is provided below:

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