The Adult Numeracy Instruction Professional Development (ANI-PD)

Field-Test Program

**Announcement and Solicitation of State Applications**

What is the Adult Numeracy Instruction Professional Development Field-Test?

*ANI-PD* is an intensive professional development model for states committed to high-quality math instruction for adults at the ABE, pre-ASE, and ASE levels. *ANI*-*PD* will field-test the model in collaboration with two (2) states between [month] 2009 and May 2010. The field-test will:

* Build instructors’ and administrators’ knowledge and use of **effective practices in math instruction;** and
* Allow instructors to deepen and expand their math content knowledge; and
* Provide ten (10) local program teams with **instructional materials and strategies** adaptable to their students’ specific goals and needs.

The *ANI* initiative is a National Leadership activity under the Adult Education and Family Literacy Act (AEFLA). MPR Associates, Inc., through a contract with the U.S. Department of Education, Office of Vocational and Adult Education (OVAE), operates *ANI* in partnership with TERC, the Center for Literacy Studies at the University of Tennessee, and Rutgers University.

Criteria for State Participation

To participate, states that submit an application must:

* Agree that the field-test will be one element of the state’s larger plan for improving math instruction.
* Commit to supporting the participation of 10 program teams (2 adult education math instructors and a program administrator per team), including:
* Providing paid release time for instructors (if applicable) to attend Institutes and complete other required tasks;
* Covering costs for 3 two-day Institutes and participants’ expenses for travel to Institutes; and
* Assigning a state liaison connected to the professional development system to the project.

All states that have **not** participated in Teachers Investigating Adult Numeracy (TIAN), a precursor of *ANI,* are eligible to apply. These states include: AZ, KS, LA, MA, OH and RI.

**States seeking to participate should submit an application by [date**]. Selected dates will be notified by **[date]**. During **[month/year]**, the two selected states will work with *ANI* staff to choose 10 local program teams that want to improve their math curriculum and instruction for adults.

Benefits of State Participation

Participating states will strengthen their capacity for high-quality math instruction in adult education by:

* Developing a cadre of 20 instructors and 10 administrators with *ANI-PD* experience to serve as instructional leaders regionally and statewide.
* Providing instructors with sample math lessons based on the latest research in math learning.
* Working with *ANI* staff to integrate this model into state professional development plans for math and other adult education initiatives.
* Joining a national effort to support state implementation of high-quality math instruction in adult education.

*ANI-PD* Activities

This year-long intensive professional development program includes:

* Three two-day Institutes for 20 instructors per state, with program administrators participating in two Institutes.
* Classroom implementation and documentation.
* Regional meetings and background reading between Institutes.

Outcomes of the *ANI-PD* Model

Expected outcomes of the *ANI-PD* model for instructors include broader and deeper mathematical knowledge, a better understanding of how adults learn math, and more effective math instruction.

Mathematics Content

Focusing on essential math content areas, including number, geometry, data, and algebra, instructors will:

1. Deepen their math content knowledge.
2. Learn how understanding develops within and across content areas.
3. Address all five attributes of math proficiency (conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition).[[1]](#footnote-1)
4. Relate math content to the various contexts in which adults play a role or aspire to (e.g., further education—GED or postsecondary —workplace, community, or family).

Instructional Strategies

Instructors will practice new teaching strategiesto help students build math proficiency. These will:

1. Build students’ repertoire of representations for understanding and communicating math content (symbols, diagrams, graphs, and words) and make connections among these representations.
2. Support the development of problem-solving, communication, and reasoning skills and make connections within mathematics and across disciplines.
3. Enable instructors to conduct formativeassessments to guide instruction and differentiate instruction across student levels and backgrounds.

Timeline for *ANI-PD* Activities

* **[Date]** Application due
* **[Date]** Notification of states chosen to participate
* **[Dates]** *ANI*staff help states identify 10 local program teams
* **[Dates]** Institute I, two (2) days at in-state site
* **[Dates]** Classroom implementation and regional meetings
* **[Dates]** Institute II, two (2) days at in-state site
* **[Dates]** Classroom implementation and regional meetings
* **[Dates]** Institute III, two (2) days at in-state site
* **[Dates]** Follow-up data collection and feedback from states.

*ANI-PD* Field-Test Costs

The ANI-PD project will pay for:

* All materials needed at Institutes and master copies of classroom materials for each participant.
* Field-test training and all expenses of the trainers.

States and programs will cover costs for:

* Paid release time for instructors (if applicable) to attend Institutes and complete other required tasks;
* Institute meetings;
* A state liaison assigned to the project;
* State and local program staff time to participate in program activities; and
* State and local program staff travel to and from Institutes and other in-state activities.

Roles of *ANI-PD* Participants

The *ANI-PD* model requires significant support for instructors within their programs and from the state. All participants have specific roles, as follows.

**State staff** will:

1. Submit the required applications to the *ANI-PD* project.
2. Recruit participants (program administrators and instructors) in consultation with *ANI-PD* staff.
3. Provide ongoing support for group meetings and local staff.
4. Articulate how the *ANI-PD* project supports state goals and provide leadership for continuing improvements beyond the field-test year.

**Local program administrators** will:

1. Identify instructors to participate (preferably two instructors per program).
2. Provide materials that support the principles of the model.
3. Redesign schedules, if necessary, to accommodate group meetings, instructor preparation, and/or consultations.
4. Attend at least two of three Institutes and observe two classes per instructor.
5. Provide an environment conducive to learning and sharing among instructors.

**Instructors** will:

1. Attend three *ANI-PD* Institutes.
2. Meet (by region within the state) twice between Institutes.
3. Test new strategies and materials in their classrooms and document their classroom practice.
4. Complete necessary surveys and participate in classroom observations.

Rationale for the *ANI-PD* Project

Math skills are increasingly important in a technological, data-driven culture. **Many ABE st**u**dents stru**g**gle with math,** however, **and more students fail the math section of the GED test than other test sections.** Yet math instruction in ABE generally receives less attention than literacy and language instruction. In ABE, math often is taught in a one-dimensional way, based on a narrow definition of proficiency.

Evidence also suggests that adult educators are inadequately trained to conduct high-quality math instruction. Survey data, for example, show that less than 5 percent of the adult education workforce is certified to teach mathematics.

The *ANI-PD* project is based on the principles that

* Professional development should result in changes in instructors’ knowledge and behavior (and, ultimately, student outcomes).
* Professional development should model good practice.

**Time Estimates for *ANI-PD* Participation**

* **State staff.** Two to three weeks during the field-test year, including attending three Institutes, supporting local staff, and working with *ANI* staff to develop state plans for continuing to improve math instruction after the field-test concludes.
* **Program administrators***.* At least four (4) days and preferably six (6) days to attend the Institutes. Additional time for classroom observations and providing meeting opportunities for instructors.
* **Instructors***.* Six (6) days to attend the Institutes. Additional time for piloting and documenting classroom implementation of lessons and attending 4 regional group meetings (twice between Institutes) of at least 2 hours each.

Please send questions regarding this form electronically, by fax, or by mail by **[date]** to:

Trudy Turner

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1. These five attributes contribute to *mathematics proficiency* as defined in *Adding It Up* (National Research Council 2001) and adopted in *Foundations for Success, The Final Report of the National Mathematics Advisory Panel* (U.S. Department of Education 2008). [↑](#footnote-ref-1)