



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.
- 3) Enable instructors to conduct formative assessments to guide instruction and differentiate instruction across student levels and backgrounds.

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
- 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 strategies to 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.

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).



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 students struggle 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
 US Department of Education
 Office of Vocational and Adult Education
 400 Maryland Avenue, SW
 Potomac Center Plaza, 11008
 Washington, DC 20002

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