

# **The Rural Systemic Initiatives Evaluation Study**

**for the**

**National Science Foundation**

# Goals of the RSI

- Improvement of science, math, and technology in rural, economically disadvantaged regions
- Preparation of a technologically competent workforce
- Enhancement of scientific literacy and science understanding and appreciation among students and the general community
- Development of community infrastructure to provide resources to sustain educational improvements

# Original Objectives of the Study

- Develop a system of indicators around each of the drivers
- Determine relative importance and value of each of the drivers
- Determine status of innovation/reform within selected communities and the identification of factors thought to support or serve as barrier to innovation and education reform
- Identify the ways and extent to which the perceived importance and value of the drivers and the characteristics of the community impact on reform efforts and student achievement in science and math

# Objectives Added to the Study

- Determine extent to which new or different forms of student assessment and teacher evaluation procedures developed with the RSI effort
- Identify contextual factors (within and across collaboratives) that serve to support reform
- Discover what processes and conditions are essential for effective partnerships within large-scale collaboratives
- Determine the extent to which technology was used to enhance the accessibility and effectiveness of math and science instruction and communication within and among collaborative members

# Drivers of Educational System Reform

- **Implementation of comprehensive, standards-based curricula as represented in all instructional practice and student assessment . . .**
- **Development of a coherent, consistent set of policies that support: provision of high quality math and science instruction for each student; excellent preparation and continuing education for teachers; and administrative support for all persons who work to dramatically improve math and science for all students**
- **Convergence of the usage of all resources to support. . . upgrade, renew and improve . . . all students . .**

# Drivers for Educational System Reform (continued)

- Broad-based support from parents, policymakers, institutions of higher education, business and industry, foundations, and other segments of the community . . .
- Accumulation of a broad and deep array of evidence that the program is enhancing student achievement . . .
- Improvement in the achievement of all students, including those historically underserved.

# Collaboratives of the Study

- Delta (MS, LA, and AR)
- Appalachia (KY, NC, OH, TN, VA, and WV)
- UCAN (UT, CO, AZ, and NM)
- Coastal (VA, NC, and SC)
- Texas (TX)
- Michigan (MI)

# Methodologies

- Surveys
- Delphi techniques
- Case studies
- Document reviews
- Interviews
- Focus groups
- Secondary data analyses

# Research Advisory Team (RAT)

- **Steve Oliver (Georgia)**
- **Mary Harris (North Dakota and Texas)**
- **Jim Jess (Iowa)**
- **Bill Webster (Texas)**
- **Gene Hall (Nevada)**
- **Paul Nachtigal (Colorado)**
- **Larry Enochs (Wisconsin and Oregon)**
- **Dan Stufflebeam (Michigan)**
- **Bob Stephens (Maryland and Oklahoma)**
- **Jack Sanders (West Virginia and North Carolina)**
- **Joe Newlin (Colorado) (deceased)**

# Case Study Sites

- East Feliciana Parish (LA)
- Humphreys County/Belzonia (MS)
- Rockcastle County (KY)
- Cocke County (TN)
- Gila River Indian Reservation (AZ)
- Wagon Mound (NM)
- Clarendon (TX)

# Case Study Sites (continued)

- Pittsburgh (TX)
- Carrizo Springs (TX)
- Charles City (VA)
- Marion (SC)
- Elizabeth City (NC)
- Whittemore-Prescott (MI)
- Baldwin (MI)
- Nah-Ta-Wahsh Public School Academy (MI)

# Project Staff

- Jerry Horn, PI
- Craig Russon
- Gloria Tressler
- Evaluation Center Support Personnel
- Consultants
  - Kenneth McKinley**
  - Brian Lotven**
  - Barbara Havlicek**
  - Research Advisory Team**

# Observations/Tentative Findings

- Aligned curricula
- Focused use and acquisition of resources
- Little movement in achievement scores
- No changes in teacher evaluation procedures
- Some modifications in student assessment procedures
- Lack of local employment opportunities that require strong math and science backgrounds
- Poorly educated adult populations
- Low value for education among community members

# Observations/Tentative Findings (Continued)

- Instruction driven by state mandated/high stakes testing programs
- Disconnect between stated values and commitments to quality education for all students
- Lack of qualified teachers and high teacher turnover
- Little use of technology to operate large collaboratives
- Rural conditions but not necessarily rural values impact local school improvement/reform efforts

# Products/Publications

- Periodic newsletter
- Case study reports (15)
- Survey and other substudy reports
- Annual reports for NSF

# Dissemination Efforts

- Reports and other publications
- Presentations at meetings of NREA
- “Command Performance” meetings at NSF
- EC website
- Invited presentations for local collaboratives
- (Tentative) Special edition of The Rural Educator and central focus of 2004 annual meeting of the National Rural Education Association

# Challenges for the Study

- Unrealistic expectations of impact on student achievement
- Geographic size and distance within and among collaboratives
- Multiple levels of authority
- Multiple state systems with different testing programs
- Incentives (or lack of) for participation in surveys, etc.
- Funding levels of projects as well as high stakes testing