Rural Schooling: Necessity is the Mother of Innovation

LOU CICCHINELLI, PH.D.
EXECUTIVE VICE PRESIDENT

MID-CENTINENT RESEARCH FOR EDUCATION AND LEARNING
DENVER, CO 80237

NATIONAL CENTER FOR RESEARCH ON RURAL EDUCATION
Heritage Room

January 24, 2011
Let’s Talk About It….

WHO DO WE HAVE IN THE AUDIENCE?

WHO HAILS FROM A RURAL COMMUNITY?

WHAT MAKES YOU THINK SO?
Rural Definitions

• **41 Rural Fringe:**
  - ≤ 5 miles from an urbanized area, or
  - ≤ 2.5 miles from a urban cluster

• **42 Rural Distant:**
  - > 5 miles but ≤ 25 miles from an urbanized area, or
  - > 2.5 miles but ≤ 10 miles from an urban cluster

• **43 Rural Remote:**
  - > 25 miles from an urbanized area, and also
  - > 10 miles from an urban cluster
Urban Areas Defined

- **Urbanized Area:**
  - Central core and adjacent densely settled territory containing at least 50,000 people

- **Urban Cluster:**
  - Central core and adjacent densely settled territory that is between 2,500 and 49,999 people
The Rural Numbers

- 7,757 Districts
- 31,026 Schools
- 858,000 Teachers
- 11,251,481 Students
Why Rural Matters

- 56% districts are rural
- 32% public schools are rural
- 21% state funds to rural schools
- 19-25% students attend rural schools
- 41% rural students are in poverty
- 22% rural students are minority
- 69% rural high school students graduate

The Rural School and Community Trust
nces.ed.gov/surveys/ruraled/
Mid-continent Research for Education and Learning

- Founded in 1966
- Denver-based
- ~120 employees
- Training, resources, research, & evaluation
- Nationally & internationally

McREL
McREL: Two Focus Areas

**Teaching and Learning**
- Curriculum and Instruction
- Standards and Assessment
- Learning 24/7

**Leadership and Systems**
- Leadership Development
- School and Systems Improvement
Types of Work

- Research
- Evaluation
- Development
- Training
- Technical Assistance
- Consulting
## Structure of the McREL Portfolio

<table>
<thead>
<tr>
<th>Lines of Work</th>
<th>Types of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research</td>
</tr>
<tr>
<td>Curriculum &amp; Instruction</td>
<td></td>
</tr>
<tr>
<td>Standards &amp; Assessment</td>
<td></td>
</tr>
<tr>
<td>Learning 24/7</td>
<td></td>
</tr>
<tr>
<td>Leadership Development</td>
<td></td>
</tr>
<tr>
<td>School &amp; Systems Improvement</td>
<td></td>
</tr>
</tbody>
</table>
Funding Sources

Work is funded by:

- Contract revenue
- Grant revenue
- McREL net assets from:
  - Fees on contracted services
  - Product sales
  - Royalty income
Central Regional Educational Laboratory
U.S. Department of ED

- One of 10 regional laboratories
- Serves seven-state region
- Assess regional needs and conduct fast response R&D projects
- Implement long-term RCT field studies to determine effectiveness of interventions
- Participate in cross-laboratory initiatives
- Disseminate research findings and related information
- January 2006 – January 2012
Regional Educational Laboratory System

To serve the educational needs of designated regions, using applied research, development, dissemination, and training and technical assistance.

Prepared: 07/06/06
Central Region Educational Laboratory
Mid-continent Research for Education and Learning

Prepared: 07/06/06
33% of all public schools are located in rural areas (30,000). The average number of rural schools across the Central Region exceeds the national average. Ranges from 29% in CO to 72% in SD.

22% of all public school students attend rural schools (10 million). The average number of rural students across the Central Region exceeds the national average. Ranges 18% in CO to 44% in SD.

• One of 16 regional technical assistance centers
• Provides research-based services to five-state region
  ○ build states' capacity to implement NCLB and help districts and schools achieve the goals of the law
  ○ improve state's access to resources, information, and services that help districts improve schools and student performance
• July 2005 – September 2012
North Central Comprehensive Center Region
McREL Rural Agenda

- Mobility of rural students
- High performing rural schools
- Teacher preparation
- Teacher recruitment and retention
- Four day week
- Supplemental Education Service in rural areas
- Native American and special populations
- English Language Learner (ELL) study
Let’s Talk About It….

Characteristics of the Rural Research Literature?

Is the Research High Quality and Rigorous?

What Topics are Covered?
A Review of Rural Education Research

Are We Making Progress?
Sparse body of strong rural research studies

Few rural researchers

Limited funding for rural research
History of Rural Research Reviews

- DeYoung – 1987
- Harmon, Howley, and Sanders - 1996
- Khattri, Riley, and Kane – 1997
- Kennapel & DeYoung – 1999
- McClure & Reeves – 2004
- Dexter, Hughes, and Farmer – 2008
- Lawrence – 2009
Collected 498 abstracts – coded into 108 topics

168 were rural in context, e.g. setting, only

106 used a comparative design and were rated on quality
Top 10 Topical Areas
Arnold et al

- Programs and strategies for special needs students
- Instruction
- School safety and discipline
- Student life and work planning
- Factors influencing academic achievement
- Students’ attitudes and behaviors
- Leadership
- Staff Recruitment and retention
- Teacher preparation and development
- Teachers’ beliefs and practices
<table>
<thead>
<tr>
<th>Topic</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning</td>
<td>91</td>
</tr>
<tr>
<td>Schools and communities</td>
<td>44</td>
</tr>
<tr>
<td>Education policy</td>
<td>30</td>
</tr>
<tr>
<td>Student growth and development support</td>
<td>27</td>
</tr>
<tr>
<td>Organization of schooling</td>
<td>18</td>
</tr>
</tbody>
</table>

Arnold et al
“The results of the literature review . . confirm that the condition of rural education research is poor . . there is no topic with a sufficient body of research . . “

Arnold et al (p.16)
• Describe the rural context

• Frame a rural research question

• Make the rural argument
  ➢ Provide compelling justification for rural conclusions
  ➢ Make a contrast between rural and non-rural

• Study a rural phenomenon

*Improving the Yield of Rural Education Research: An Editor’s Swan Song - 2007*
1. Determine if the topical focus of rural research has shifted since 2005?

2. Are the studies focused on rural issues?

3. Do more recent studies meet Coladarci’s criteria related to quality?
The Search for Rural Studies

322 studies found

291 electronic searches

31 requests for AERA papers

Screened to 59 articles

13 authors responded

72 papers reviewed

62 articles met criteria
Top 10 Topical Areas
Cicchinelli & Barley

- Factors influencing academic achievement*
- Teacher preparation and development*
- Characteristics of rural schools*
- Student life and work planning*
- Curriculum
- Teacher and staff characteristics
- Education leadership
- Teachers’ beliefs and practices
- School and community
- Staff recruitment and retention
Top Five Rural Topics
Then and Now

2005

- Programs/strategies for special needs students
- Instruction
- School safety and discipline
- Student life and work planning
- Factors influencing academic achievement

2010

- Factors influencing academic achievement
- Teacher preparation and development
- Characteristics of rural schools
- Student life and work planning
- Curriculum

McREL
Coding for Rurality

- Rural context only
- Rural specific
- Rural – non-rural comparison
Results From 62 studies

- 44% Rural context only (27)
- 31% Rural specific (19)
- 26% Rural/nonrural contrast (16)
Coding for Quality

- Objectives or purpose
- Perspective or theoretical framework
- Methods, techniques, or modes of inquiry
- Data sources, evidence, objects or materials
- Results and/or substantiated conclusions
- Scientific or scholarly significance of the study
- Relevance to education
- Potential to promote development of new skills/knowledge
Mean Quality Score by Type of Study

- Rural specific: 31.4
- Rural context only: 27.3
- Rural/nonrural comparison: 25.6

Total possible = 40
Average quality score
<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>of</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural specific</td>
<td>19</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Rural/non-rural comparison studies</td>
<td>4</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Rural context only</td>
<td>0</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Total with rural focus</td>
<td>23</td>
<td>62</td>
<td>23</td>
</tr>
</tbody>
</table>
Rural question

How does the percentage of teaching assignments filled by highly qualified teachers vary in rural districts in New York?

Non-rural question

What are the greatest challenges impeding effective education of ELLs across the state?
Characteristics of the 23 Rural Studies

- **10 quantitative designs**
  - 4 contrast rural and non-rural
  - 5 use statistical controls
  - 2 examine interactions
- **13 qualitative designs**
  - 1 contrast rural and non-rural
- **Topics**
  - Student life and work planning
  - Factors influencing academic achievement
  - Teacher preparation and development
  - Education leadership
  - Student attitudes and behaviors
  - Teacher beliefs and practices
Conclusions and Actions

- Studies merely conducted in rural settings continue to inflate the apparent literature base
- Topics have shifted toward “systems” questions
- Both quantitative and qualitative need to be more rigorous
- Rural researchers need to set a more focused research agenda to guide the field
Let’s Talk About It….

What challenges and opportunities exist for K-12 education? And for rural education in particular?
Outlines a federal role in education

Guides shared work with parents, students, educators, business and community leaders

Presents a strategy for providing America’s students with the world-class education they need and deserve

Arne Duncan, Secretary of Education; Carmel Martin, Assistant Secretary, OPEPD, March 2010
U. S. Department of Education
Reform Priorities

- College- and Career-Ready Students
- Great Teachers and Great Leaders
- A Complete Education
- Meeting the Needs of Diverse Learners
- Successful, Safe and Healthy Students
- Fostering Innovation and Excellence
College- and Career-Ready Students

- Support college- and career-ready standards, prepare college- and career-ready students
- Reward progress and success
- Turn around the lowest-performing schools

Great Teachers and Leaders in Every School

- Recruit, prepare, develop, and reward effective teachers & leaders
- Support bold action to increase the number of effective teachers and leaders where they are needed most
- Strengthen pathways into teaching and school leadership in high need schools
Meet the Needs of Diverse Learners

- Improve programs for ELLs and encouraging innovative programs and practices
- Build the knowledge base about what works
- Maintain and strengthen formula grant programs for Native American students, other special populations, and rural districts
- Meet the needs of students with disabilities

A Complete Education

- Strengthen instruction in literacy and science, technology, engineering, and math
- Support teachers and students in teaching and learning to more rigorous standards
- Improve access to well-rounded education in high needs schools
- Expand access to college coursework and other accelerated learning opportunities in high-needs schools
Blueprint for Reform Priorities

Successful, Safe, and Healthy Students

- Provide a cradle through college and career continuum of supports in high-poverty communities
- Support programs that redesign and expand the school schedule and provide high-quality afterschool programs
- Use data to improve students’ well-being, and increase capacity to create safe, healthy, and drug-free environments

Foster Innovation and Excellence

- Provide incentives to states and districts willing to take on ambitious, comprehensive reforms
- Develop, validate, and scale up promising/proven strategies to improve student outcomes
- Expand educational choice within the public system by creating high-performing new schools
Let’s Talk About It….

WHAT ARE CHARACTERISTICS OF A RURAL RESEARCH AGENDA?

KEY RURAL ISSUES TO ADDRESS?

WHAT ARE OPPORTUNITIES FOR INNOVATION IN RURAL AREAS?
Toward a Rural Research Agenda

- Use of longitudinal data sets to answer questions
- Policy studies to promote quality teachers and teaching
- School and district leadership studies of effectiveness
- Best practices for graduating career- and college-ready students
- Assuring opportunity and equity for all rural students
- RCTs of interventions for “struggling” rural schools
## Priorities vs Research Available

<table>
<thead>
<tr>
<th>Priority Reform Areas</th>
<th>Top Research Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>- College- and Career-Ready Students</td>
<td>- Curriculum</td>
</tr>
<tr>
<td>- Great Teachers and Great Leaders</td>
<td>- Factors influencing academic achievement</td>
</tr>
<tr>
<td>- A Complete Education</td>
<td>- Teacher preparation and development</td>
</tr>
<tr>
<td>- Needs of Diverse Learners</td>
<td>- Staff recruitment and retention</td>
</tr>
<tr>
<td>- Successful, Safe and Healthy Students</td>
<td>- Education leadership</td>
</tr>
<tr>
<td>- Foster Innovation and Excellence</td>
<td>- Student life and work planning</td>
</tr>
</tbody>
</table>

McREL
Opportunities for Innovation in Rural Settings

- Rural school reform effectiveness
- Diversity and equity in rural settings
- Impact of special programs: RttT; I3;
- Value and nature of community involvement
- Autonomous school options to charter schools
- Effectiveness of on-line and distance learning options
Final Thoughts for a New Start?
Contact Us

Mid-continent Research for Education and Learning (McREL)
4601 DTC Blvd., Suite 500
Denver, CO 80237-2596
303.337.0990

http://www.mcrel.org
relcentral@mcrel.org
Turning Around Chronically Low-Performing Schools

Rural Support Resources

REL Central
http://www.mcrel.org/our_work/REL.asp

Center on Innovation and Improvement
http://www.centerii.org/

What Works Clearing House
http://ies.ed.gov/ncee/wwc/

IES Practice Guides

National Center for Education Statistics
http://nces.ed.gov/surveys/ruraled/