This report summarizes the findings of the third National Congress on Rural Education, held during the 1994 convention of the National Rural Education Association (NREA). The Congress considered the following question: What infrastructure is necessary to provide an environment conducive to the effective use of available and emerging technologies in rural schools? Regional forum groups identified needs for and barriers to developing viable technological systems for rural schools, prioritized the needs, and suggested strategies for overcoming barriers and meeting the needs. The most frequently identified needs were intrastate and interstate communication networks, incentives for installation of technology, connectivity of all existing networks, policy guidelines and support, rural leadership and vision for development of technology, and recognition of school systems as "players." The most frequently identified barriers were current systems not being used, "turf" wars, financial considerations, training and professional development, and geography. Solutions and strategies included reevaluating available resources, developing partnerships and collaborative efforts, identifying professional expertise, adjusting utility tariffs, and funding strategies. Appendix lists all needs, barriers, and solutions considered, and provides information on NREA executive committee members for 1994 and 1995. (SV)
Proceedings

National Congress on Rural Education
Tuscaloosa, Alabama
October 14-18, 1994

Sponsored by the
National Rural Education Association

Published by the
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Proceedings

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Introduction

"The cultural and social health of America's rural sector depends on how it participates in the national and global economy. At present, the terms of this participation are not clear, but education is the key."

The Condition of Education in Rural Schools
Published by OERI
Joyce Stern, Editor, 1994

It is because of a lack of clarity about how the rural sector must participate in national and global issues that the creation and continuing sponsorship of a national forum to define the issues and direction for rural education must be widely endorsed.

Education, indeed, is the key. Rural children depend upon their mentors to ensure that they are adequately prepared to take their places in an ever-expanding worldwide society.

Accepting the challenge to help create a clear vision of the role of the rural school in the society of today is the National Rural Education Association in its sponsorship of a National Congress on Rural Education. Without a visionary plan for the future, the rural school is at risk of failing to provide a quality, up-to-date education for rural children.

The goal of NREA's 1994 Congress on Rural Education was to provide a forum for educators from all walks of rural life to congregate to identify strategies and solutions that will enable rural schools to access ever-expanding resources through the advanced technologies now available.

"I am the door to opportunity. To most people I am just the big front door to a rural school. But to my students, I am the passage to a great quest, a fine education . . . . Hopes and dreams for the future are fulfilled as my students in a rural school pass through me, the door to opportunity."

Amy Newby, Kansas 8th Grader
(Excerpt from award-winning essay)
Executive Summary

Background

Following the lead of Missouri and Arizona, the National Rural Education Association created a national forum for rural representatives from educational organizations and institutions, bringing them together in a collaborative effort to formulate a statement of common needs and vision for the rural schools of the future. With this mission in mind, the first National Congress on Rural Education was convened in 1992 in Traverse City, Michigan. The following year, Burlington, Vermont, became the site for the second Congress. In 1994, the third annual National Congress on Rural Education was convened in Tuscaloosa, Alabama.

History of the Concept

The concept of the Congress had its beginnings in 1989 in Missouri where rural educators believed more rural grassroots definitions and solutions were needed than existing processes could provide. Forums were held to focus attention on the real problems facing rural education and, at the same time, develop solutions to those problems. Rural educators in Arizona adopted the Congress after observing Missouri's Congress in operation. As did Missouri, Arizona used it with success. With the election of Dr. Bill Peter of Missouri as the president of the National Rural Education Association, the rural education Congress concept was introduced to the Executive Committee, which adopted it as a part of the annual convention.

The following report summarizes the findings of the 1994 National Congress on Rural Education held at the annual convention of the Rural Education Association on October 17, 1994, in Tuscaloosa, Alabama.
Executive Summary

Format and Process

The initial charge of the 1994 Congress was to consider the question:

What infrastructure is necessary to provide an environment conducive to the effective use of available and emerging technologies in rural schools?

The Congress was organized using a town hall format with an initial general assembly, which presented basic information on the topic and which gave instructions to the participants on the Congress procedures.

Participants were then assigned to smaller forum groups, using the geographic organization of the regional educational laboratories. These groups focused on the needs and barriers of developing viable technological support systems for rural schools. These were then prioritized, and, from this list, strategies and solutions were identified that would facilitate successful development of the priorities.

The final session constituted the town hall where the groups reconvened into a second general session for presentation of their group findings, conclusions, and recommendations.

This report is the consolidated summary of the final session.
Format and Process

Initial Charge
The Congress used a general assembly, forum group, and town hall format (see appendix for schedule). At the general assembly, participants received instructions on how the Congress was going to proceed and general information concerning the focus topic. Forum groups were organized and the charge was given to discuss the following question:

What infrastructure is necessary to provide an environment conducive to the effective use of available and emerging technologies in rural schools?

Forum Groups
Participants were grouped according to the geographic areas served by regional educational laboratories. Each laboratory provided a facilitator to guide the group discussions. A recorder was selected from the group participants to chart the ideas as they were offered by the group, and a recordkeeper was appointed to keep a written record for the group's presentation at the final town hall session and for the published proceedings.

The initial discussion focused on the needs for and barriers of developing viable technological systems and support for rural schools. The identified needs were prioritized, and from this prioritized list, strategies for overcoming the barriers and meeting the needs were suggested and recorded by group consensus. Approximately one and one-half hours was given to this task.

Town Hall Meeting
At the appointed time, all groups reconvened in the general assembly area to present the conclusions of their group. Questions were answered and short discussion was allowed for clarification of each presentation. The charge was then given for the town hall reporter to collate each group's ideas into a regional report, and then prepare a consolidated summary of the Congress as a whole for distribution to all NREA members, Congress attendees, decisionmakers who influence rural issues, and others whose interests lie in rural school concerns.
Within each forum group, a wide variety of needs and barriers was identified (see appendix for a complete listing). Those most frequently identified were:

**Needs**

- Communications intra-inter-state network
- Incentive for installation of technology
- Connectivity of local, state, national, business, university networks
- Policy guidelines and support
- Leadership/vision for development of technology in rural areas
- Recognition of school systems as “players”

**Barriers**

- Current technologies or systems not being used
- Political/territorial — “Turf” wars
- Financial considerations
- Training/professional development for end users
- Geography

**Priorities**

Participants were asked to select the needs and barriers that were most important; they listed those which were most likely to hinder providing an environment conducive to the effective use of available and emerging technologies in rural schools.

- Federal, state, local policies that control distribution of available resources, fundraising capacities, standard protocols, credentialing of teachers
- Infrastructure; i.e., phone lines, use of current capabilities
- Vision, leadership
- Collaboration, cooperation, linkages
- Training at all levels
Strategies and Solutions

Given the needs and barriers identified, the groups then identified strategies and solutions to overcome the problems in developing an infrastructure for the effective use of available and emerging technologies in rural schools. The most frequently mentioned strategies and solutions were the following (not in priority order):

<table>
<thead>
<tr>
<th>Strategies and Solutions</th>
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<tbody>
<tr>
<td>• Reevaluate the use of available resources through needs assessments to establish where we are now; redistribute resources; develop a plan of action — direction for the future; create a vision, a new technology-inclusive paradigm.</td>
</tr>
<tr>
<td>• Work with local, state utilities for adjustment of tariffs for feasible use of technology in schools, for exchange of knowledge on what is happening in technology, for development of cooperative and collaborative efforts, for provision of lines and cables to rural areas.</td>
</tr>
<tr>
<td>• Create other linkages — to business, universities, government agencies, other school districts.</td>
</tr>
<tr>
<td>• Strengthen local district, community, state partnerships already in existence.</td>
</tr>
<tr>
<td>• Locate expertise for advice on technology plan, teacher/community training and professional development, evaluation of equipment, and curriculum integration.</td>
</tr>
<tr>
<td>• Establish funding priorities, seek alternative funding, lobby legislatures for technology funding and linkages, promote funding partnerships/consortia, make grant funding more accessible to rural areas.</td>
</tr>
</tbody>
</table>

The National Rural Education Association Congress on Rural Education was attended by 200 delegates. Delegates were invited from each state. Through the use of the group techniques of brainstorming and town hall meetings, the members of the Congress reached a consensus on the strategies and solutions that would help break down the barriers identified in the forum groups.
Conclusions

Reevaluation of available resources was recommended as a first step in developing a visionary plan of action. This would include assessing needs, redistributing resources, and creating a technology-inclusive paradigm for the schools.

An often-mentioned strategy centered on developing and strengthening partnerships and collaborative efforts with entities at all levels that have an impact on rural education. These include political areas; utilities that provide telephone and cable services; professional organizations; community private and public organizations; businesses; and other educational institutions such as local school districts, community colleges, and university systems.

Strengthening these partnerships would give schools access to updated technological information through the identification of professional expertise in this area. Professional development for teachers, administrators, and parents; evaluation of equipment needs; and curriculum integration would further enhance the new local paradigm.

Identified as essential was an adjustment of utility tariffs to help make the use of technology more feasible in the rural schools. Working with the utilities would help schools update their knowledge of what is available and how they could interface with the mission of other services to rural communities; in other words, schools would be seen as important players in the technology area.

An important strategy focused on funding. Monies for the initial purchase, installation, use, maintenance, and updating of equipment must be sought or reallocated. Priorities for expenditures must be revisited and alternative funding sources identified. Making grant funds more accessible to rural areas was seen as essential.

The participant reactions to the Congress were very positive. Scheduling a forum for an annual status report is recommended at the next appointed time to update progress toward these goals and to offer assistance and encouragement where needed to those groups seeking to provide leadership in the revitalization of the vision of the rural school.
Needs and Barriers to the Effective Use of Technology in Rural Schools

**Needs**

- Communications network inter-intra-state
- Incentive for installation of technology
- Connectivity of local, state, national business, universities for technology advance in schools
- Policy guidelines and support
- Integrating/recognizing school system as “players”
- User and provider understanding of uses of technology in schools
- Leadership/vision for development of technology in rural areas
- Training and technical assistance
- Knowledge of what is available, what is needed, and how to use it
- Resources and expertise
- Cooperation of utilities for phone, cable, microwave, cellular, and cost containment

**Barriers**

**Political/Territorial**

- Not using current technologies or systems
- College, school, public cooperation and articulation
- Attitude
  - Some don’t want technology, don’t see need, seen as replacement of teacher or lessening of job security
  - Turf wars exist among and within agencies — lack of cooperative effort among large/small phone carriers, competition among suppliers, not willing to share
  - Confusion about what to purchase, awareness of what is out there
  - Technology seen as inflexible, potential not understood
  - Fear of change, uneasiness about rapid pace of change, fear of technology
Barriers (continued)

- Low density of rural areas produces less availability of resources and less incentive for provision of services
- Lack of future thinking/vision, reliance on “old” paradigms
- Clear policies and standards

Funding

- Cost of initial purchase, installation, use, updating maintenance
- Excessive utility rates for users
- Unequal availability due to differences in financial structure of local districts, other support entities
- Schools forced to rethink spending priorities, no new funding for technology

Training

- How to “install” an innovation, how to facilitate change
- How to use technology in classroom, integration into subject areas
- Credentialing for teachers, standards for instruction
- Ongoing assistance and training after initial sessions
- Lack of availability of expertise for training and assistance
- Time constraints within school structure for use and training
- On-going data gathering to validate use of technology
- Making home/school connections with technology use

Geography

- Mountains inhibit microwave or cellular reception
- Weather conditions/heavy fog, etc.
- Isolation
Strategies and Solutions

Work with local/state government to adjust tariff

Adjunct university teacher from field delivers course in isolated areas using technology

Business partnerships

Develop a network of rural technology trainers

Access educational service centers and regional labs for information and training

Establish partnerships with others

Identify/address personal concerns of school personnel, families, communities

Administrators brought up to speed

Make use of technology part of culture

Conferences and meetings should make use of technology more often

Find and support local “heroes” to move a community to expand the infrastructure for full access for all

Leadership should take risks

Bottom-up pressure on leaders

Get higher education, K-12 schools, governments to assess need together

Training in change and futuring

Utility agencies apprise educational agencies of recent technology and its impact on educational users

Empowerment of user with clear instructions, easy-to-read manuals

Willingness to rethink the total system (change paradigms)

Commitment to match funds
"When is time to act" barrier

Paradigm shift

Money and release time to learn

Federal grants and state grants more accessible for rural districts

Provide access to comprehensive database to access for information retrieval

Develop partnerships to increase resources and develop, implement, and evaluate the plan

State level leadership should help bring this together

Build incentives that promote partnerships for funding

NREA provides information to administrators about technology

Local policy on minimum technology competency for employees

Training for school boards, community leaders, administrators

Assess competency of program by the competency of student using technology

Evaluate use of available resources

Seek waivers to mandates

Develop a plan to meet needs of infrastructure

Recognize need for additional time

Federal and state legislation and policy to develop standard protocol

Give incentives for lower rates

Lower rates from service providers

Share databases, research, projects
Strategies and Solutions (continued)

Make use of plans already in place

Federal agencies collaborate within their own agencies to apply use of technology in own arenas

Include students in planning

Creative funding — funding alternatives

Public relations

Improved communication between innovators of technology and its users

Strong marketing efforts

Time for professional development

Visionary leadership

Feasibility study needed

Patience

Enabling policies for certification and accreditation

Phone co-ops, cable, satellite, cellular

Provide greater flexibility in utilization of grant funds

Time for planning

Establish partnerships

Constituencies should be inclusive of state, local people

Executive level leadership cultivate positive relationships
<table>
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<tr>
<th>Time</th>
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<tr>
<td>1:30 - 2:00</td>
<td>General Assembly</td>
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<tr>
<td>2:00 - 2:50</td>
<td>Regional Group Session I</td>
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<tr>
<td></td>
<td>Needs and Barriers</td>
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<tr>
<td>2:50 - 3:05</td>
<td>Break</td>
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<tr>
<td>3:05 - 4:00</td>
<td>Regional Group Session II</td>
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<td></td>
<td>Strategies and Solutions</td>
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<tr>
<td>4:00 - 5:00</td>
<td>Town Hall</td>
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</table>
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