

R²Ed Working Paper 2013-2

Advancing Rural Education Research: Importance of Interdisciplinary Research Partnerships¹

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November, 2013

¹Development of this working paper was completed at the National Center for Research on Rural Education (R²Ed), funded by a grant from the U.S. Department of Education's Institute of Educational Sciences (R305C090022). The paper was presented originally by the authors at the 2013 Rural Futures Conference. The statements made herein are those of the developers and are not meant to represent opinions or policies of the funding agency.



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Recommended citation:

Hellwege, M.A., O'Connor, M.A., Nugent, G. C., Kunz, G. M., & Sheridan, S. M. (2013). Advancing rural education research: Importance of interdisciplinary research partnerships (R²Ed Working Paper No. 2013-2). Retrieved from the National Center for Research on Rural Education: r2ed.unl.edu

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Introduction

- According to the National Center for Education Statistics (2010), 56% of school districts in the United States are rural.
 - Rural education research has a responsibility to address the unique, pivotal concerns of these rural schools.
- Coladarci (2007) proposed that rural education research has methodological and substantive shortcomings and addressed future directions for overcoming such limitations.
- Discussions among participants at *Connect-Inform-Advance*: 2013 National Conference on Rural Education Research offers a broader perspective on the current state and future directions of rural education research.
- By engaging national *researchers*, *practitioners*, *and policy makers* in guided discussion about current and future needs in rural education research, the conference provided a platform for exploring the critical role of research in rural education, the current condition of rural education research, and future directions.
- Conference Purposes:
 - Engaging national researchers, practitioners, policy makers, trainers, and leaders in constructive dialogue about current and future rural education research.
 - Communicating current rural education research findings.
 - Exploring methods by which research findings can be translated and transmitted to rural practice and policy.
- Conference content:
 - Presentations were organized around three sources of influences on rural student academic success:
 - Teacher influences: explored the impact of targeted professional development experiences as well as the differences of professional development experiences for teachers in rural, urban, and suburban areas.
 - Community and family influences: explored the impact that community resources and parent involvement can make in rural student academic success.
 - School and contextual influences:
 - Presentation about combining empirically validated curricula with an innovative cultural approach to rural education.

- A descriptive study of differences in academic performance based on location and access to certain resources.
- Discussion of methodological considerations that impact rural education research.

Method

Participants

- Participants included 156 conference attendees representing 19 states.
- Participants represented a diverse range of professions related to rural education (see Figure 1) including policy makers (5%), practitioners (32%), researchers (50%), state department of education workers (10%), and other areas such as employees at non-profit associations (3%).

Data Collection and Analysis

- Research presentations addressing the three topic areas laid the foundations for the breakout roundtable discussions, which were led by designated facilitators.
 - The discussions for each topic area centered on the guiding questions (see Appendix A
 for a full list of questions) which were prepared in advance and distributed to table
 discussion facilitators.
- Extensive notes of the discussions at each table were taken by either graduate research assistants or conference attendees who were designated note takers.
 - In all, 28 discussions were held across the three topic areas, and 46 pages of single-spaced notes were generated to capture these discussions. These bulleted notes formed the basis of the qualitative content analysis.
- A general, inductive qualitative approach for educational research was selected in order to understand the participants' perspectives related to the conference themes (Creswell, 2012; Hatch, 2002).
- Data analysis was conducted using qualitative research software MAXQDA to help codify and organize the roundtable discussion notes into major themes and ideas.
 - Two graduate research assistants independently coded the roundtable discussion notes, organizing each comment into a specific code label (e.g., organization structure/issues, training/professional development).
 - Through research team meetings, a shared code list was developed by refining the code labels (e.g., future considerations in research and future directions code labels were combined, partnerships and collaboration in future research were combined).

• After refining code labels, the research team analyzed the data, looking for interrelationships and major themes, as suggested by Saldana (2013) and Bazeley (2013).

Results

Analysis revealed four major themes in conference discussions with a primary theme of
interdisciplinary research partnerships. These themes emerged over the course of the two-day
conference and across the conference topic areas of teacher, community and family, and
school and contextual influences on rural student academic success.

• Interdisciplinary Research Partnerships

- Multidirectional partnership between research, practice, and policy will help accomplish
 a translational agenda that comes from a meaningful, ongoing dialogue among multiple
 stakeholders.
 - "The foundation of rural research is building relationships, building capacities, and creating meaningful opportunities."
 - Collaborations and partnerships need to be developed among various educational stakeholders such as Local Educational Associations, Educational Services Units, state agencies, higher education, local school boards, families, communities, researchers, and policymakers.
 - "It is important to get input about what needs to be studied ... stakeholders should drive the topics of research."
- Developing ways to effectively maintain communication is essential. We can advance the rural education research agenda through continuing the dialogue that was started at the conference and building "more authentic partnerships" among educational stakeholders

• Defining and Accounting for the Rural Context

- There is a lack of a consistent definition of "rural."
 - It can be difficult to capture a unified definition of rurality given that there are so many demographic factors to consider (e.g., geographic locale, cultural diversity, economic stability).
 - Need for meaningful, relevant criteria for the rural designation is important because the rural context is considered a defining variable in conducting research in rural communities.
 - "Rural communities have special contexts, and research needs to be done to highlight the contexts so we can bring light to them."

- Need to more carefully identify contextual variables that should be considered when conducting research in rural communities.
- Some participants stated it is important to consider the commonalities that exist among rural communities and between urban and rural communities.

Influences on Student Outcomes

- Concern about a lack of a unified definition of and methods for measuring student success.
 - Standardized testing is insufficient for capturing the breadth of student success.
 - "What we consider success is probably broader than achievement."
- Participants discussed that there are a myriad of influences (e.g., student engagement in the classroom, community support, parent involvement, and educational experiences) on rural student success that are not traditionally considered in research but need to be examined in future studies.
- Professional development and training opportunities for teachers were seen as pivotal to rural student success.
 - "In higher education, we complain about the quality of the students coming in to college. We don't realize that we are part of the problem because we train the teachers who taught them, so in a sense we train those students."
 - Suggested that follow-up be built into professional development experiences to ensure that the knowledge gained is applied to their teaching.

Future Directions for Conducting Rural Education Research and Disseminating Results

- The field of rural education research must figure out efficient and effective ways to get relevant research into the hands of consumers who will help accomplish the agenda for advancing rural student academic success.
- Research results should be communicated in a "user-friendly and easily consumable" format so that they can be translated into meaningful, understandable discussions that practitioners can apply to their local situations.
- Need a comprehensive research agenda with multiple methodologies in rigorous research to advance the field of rural education research.
 - Rural education researchers need to "develop methodologies that will allow us to capture the unique factors of rural communities instead of excluding them from designs/research projects."

- Specific suggestions for future rural education research:
 - Move away from a deficit model and focus on strengths.
 - Take into consideration community-related variables (e.g., service-learning opportunities, generational influences).
 - Examine how to empower families to be involved in research as well as their children's education.
 - Evaluate the sustained impact of teacher professional development experiences.

Discussion

- One key theme that emerged is the need for interdisciplinary partnerships among research, practice, and policy.
 - This theme, not explicitly articulated in previous reviews, was seen as providing a critical foundation to achieve a translational research agenda.
 - Conference attendees emphasized the need for input from stakeholders (e.g., policymakers, practitioners, families, communities) in determining research agendas and defining research questions.
 - This multi-directional dialogue was seen as the way to develop a meaningful research agenda and better insure that research findings get infused into practice.
 - These collaborative relationships may help to address some of the definitional issues identified by participants. Working together, all parties can determine how to define student outcomes and rurality, as well as account for the unique context of rural communities.
 - These partnerships could also inform researchers how to communicate their findings so that they are easily transferable to practice.
- Conference participants also noted the importance of the rural context and the lack of a consistent definition of "rural" a shortcoming that has been noted by other studies.
 - One panelist during the conference urged researchers to clearly identify contextual variables arising from their research that could provide direction for future explorations
 - While this reporting may be at the qualitative and descriptive level, it provides a starting point for rural education research to document meaningful contextual variables variables that go beyond traditional population figures, geographic location, and locale codes.

- It is only through documentation of these variables that we can begin to understand the nuances of rural education and its unique characteristics and underlying mechanisms that mediate and moderate outcomes.
- Such understanding can also facilitate researcher-school partnerships.
- Conference participants also identified the importance of defining rural student academic success broadly going beyond a focus on achievement and standardized tests, which confirms and verifies earlier findings by Arnold, Newman, Gaddy, and Dean (2005) and Cicchinelli (2011).
- Future rural education research needs to honor the unique characteristics of rural while looking for common factors among different types of communities. These goals can be accomplished through intentional interdisciplinary research partnerships and clearer definitions in research design and analysis.
- Future research questions need to better address the needs and characteristics of rural education in order to serve students, teachers, and administrators in rural communities.
- The results of this study shed light on future approaches to rural education research, and extend and complement earlier comprehensive reviews provided by rural researchers.

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Appendix A

Guiding Questions for Roundtable Discussions

Questions Addressed at Each Roundtable:

- 1. What have we learned from research that can inform practice and policy related to a) teacher, b) family and community/school and c) contextual influences* on rural student achievement?
- 2. What can we learn from future research that can inform practice and policy related to a) teacher, b) family and c) community/school and contextual influences* on rural student achievement?
- 3. What are the challenges associated with conducting research related to a) teacher, b) family and c) community/school and contextual influences* on rural student achievement and how can we meet these challenges?
- 4. What is needed at this point to move this rural education research agenda forward?
- 5. What are the ongoing supports needed in this interplay among research, practice, and policy to make this a meaningful and progressive process that leads to improved outcomes for rural students? For example, how do we maintain collaborative partnerships so that the dialogue leads to meaningful research and application?
- 6. Thinking ahead to translation of research to classroom, what should we bear in mind when conducting research that we hope will lead to acceptable and meaningful outcomes for rural students?
- 7. How can researchers, practitioners and policy-makers best incorporate feedback from teachers, parents and caregivers regarding intervention acceptability and utility?

Questions Dealing with Teacher Influences on Rural Academic Success:

- 1. How can schools, districts, states and universities use research to inform professional development opportunities for rural teachers?
- 2. How can practitioners' experiences with current professional development practices, including coaching, inform future rural education research?
- 3. Based on the research and your experiences, what are your perceptions of the role of distance technology research in influencing rural education practice and policy?
- 4. What are the next immediate steps for rural education research, practice and policy related to teacher influences on rural students' success?

Questions Dealing with Community and Family Influences on Rural Student Academic Success:

- 1. How can schools, districts, states and universities use research to inform family-school partnership approaches / programs implemented in rural communities?
- 2. How can families' and practitioners' experiences with family-school partnership approaches/programs inform future rural education research?
- 3. What are the next immediate steps for rural education research, practice and policy related to community and family influences on rural students' success?

Questions Dealing with School and Contextual Influences on rural Student Academic Success:

- 1. Based on the research and your experiences, what do you believe schools, districts, states and universities have begun to learn about school and contextual factors that influence student outcomes in rural communities?
- 2. How are changes in rural education environments including demographic factors, school consolidation, and the growth of charter schools influencing rural education research?
- 3. What are the next immediate steps for rural education research, practice and policy related to school and contextual influences on rural students' success?

^{*}Discussions focused on just one of these three influences.

Figure 1. Statistics of conference participants by profession

