

Doctoral Research in Rural Education and the Rural R & D Menu

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We analyzed abstracts of 196 doctoral dissertations completed during 1989-1993, using The Rural Education Research and Development Menu developed jointly by the Appalachia Educational Laboratory and members of the rural education special interest group of the American Educational Research Association. Categories from the menu were used to categorize issues investigated by the dissertations. Overall school effectiveness was the topic to which dissertations were most frequently assigned, whereas the use of (advanced electronic) technology in rural schools was the topic to which dissertations were least frequently assigned. Implications for researchers and practitioners are offered.

Take doctoral dissertations. Who reads them? Overspecialized, overestimated, and overweight, they represent the triumph of pedantry over intellect in ever-diminishing fields with ever-dwindling applications. (George Kneller, 1957/1994)

Despite the potential importance of doctoral dissertations, their utility and worth remain unrecognized unless published in an appropriate journal. Fortunately, another means by which interested persons can examine the contribution of doctoral dissertations is to review *Dissertation Abstracts International* (DAI).¹

In recent years, researchers in several fields of study have summarized doctoral research. For example, Valerius and Mackay (1993) conducted a content analysis of 246 recreation, parks, and leisure-related dissertation abstracts for the years 1980-1990. Similar summaries have been con-

¹Subsequent discussion will refer to "resumes" as well as "abstracts." Abstracts are the narrative description of the contents of an item in a bibliographic database. Resumes refer to the complete record for an item, which typically includes, in addition to the abstract (the focus of our work in this study), many other fields (title, descriptors, author, publication type, and so forth). These additional fields are generally understood as either indexing fields (e.g., descriptors, identifiers) or cataloging fields (e.g., author, title, institution).

An earlier version of this article was presented at the 1995 meeting of the National Rural Education Association, Salt Lake City. A matrix of information about the relevant dissertations—author, title, institution, adviser, length, year, setting of study, menu topics and areas, and DAI order number—is available free by calling 800-624-9120.

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ducted for industrial education (Foster, 1992), rehabilitation (Leahy, 1992), technology education (Zuga, 1994), self-directed learning (Long, 1991), moral development and values education (Cochrane & Hill, 1993), women in K-12 educational administration (Grady & O'Connell, 1993), science education (Lederman, 1993), curriculum development (Tamir & Friedler, 1992), and supervised experience in agricultural education (Barrick, 1991).

A review of resumes in the ERIC database, however, reveals that no one has yet surveyed doctoral research in rural education. The field of rural education lacks any report of the scope of relevant doctoral inquiry. This shortcoming should concern researchers and practitioners alike.

Interest in rural education research has increased in recent years, nonetheless. In 1991, the Subcommittee on Rural Education of the Federal Interagency Committee on Education (FICE Subcommittee) and the United States Department of Education's Office of Educational Research and Improvement (OERI) developed an *Agenda for Research and Development on Rural Education* (FICE Subcommittee, 1991). In 1992, the Appalachia Educational Laboratory (AEL) conducted a modified Delphi study, with selected members of the Rural Education Special Interest Group of the American Educational Research Association (AERA), to validate and update the original agenda. This 2-year effort resulted in a "menu" for research and development in rural education (Hambrick, Sanders, Stowers, & Williams, 1994).

The menu included six major topics representing a total of 47 areas (Table 1). Possible uses for the menu might be guided by responses to three questions: What are the purposes of the menu? Does the menu "hang together"? How comprehensive is the menu?

The first question concerns functionality. Simply put, the aim of the menu is to stimulate discussion and interest in rural education research. It is not a directive, but it nonetheless holds promise for guiding those who seek to con-

Table 1
Major Topics and Areas of R & D Menu on Rural Education

Major Topic	Area
1. Overall effectiveness of rural schools	<ul style="list-style-type: none"> A. Improve access to educational opportunity in isolated rural communities. B. Identify the problems unique to the delivery of education in isolated rural communities in the following special populations: handicapped, disadvantaged, and gifted. C. Identify characteristics of effective rural schools. D. Conduct evaluation studies of student achievement in rural schools. E. Assess the federal role in rural education. F. Assess the impact of educational reform on rural schools. G. Assess the degree to which rural schools are educating students for participation in a national economy versus a local economy. H. Assess SEA role in rural education. I. Assess teacher education institutions' role in rural education. J. Assess student expectations—view of the future. K. Assess the ways in which rural school culture breaks down class distinctions or promotes increased cultural understanding. L. Assess the role of rural schools in an "integrated services" approach to meeting community needs. M. Understand the change process and extent to which change initiated in one part of school can encourage change throughout the school culture.
2. Curricular provisions in rural schools	<ul style="list-style-type: none"> A. Provide adult literacy improvement in isolated rural communities. B. Assess satisfaction of students, teachers, administrators, parents, and community leaders with current curriculum and instruction. C. Assess how state and federal curriculum development projects consider the needs of rural schools.
3. School and community partnerships on behalf of rural schools	<ul style="list-style-type: none"> A. Identify effective school/community private sector partnerships. B. Assess how federal/state/local policies are impacting rural schools and rural communities. C. Review legal procedures and issues pertaining to school and community partnerships on behalf of rural schools. D. Examine the factors of rural community economies that influence rural students' decisions to remain in school and graduate. E. Assess if Native American communities, or their learning environments, differ from other rural communities. F. Assess the role of the rural school in promoting employability. G. Identify effective alternative schooling programs in the rural communities. H. Identify the social and cultural issues of isolated rural communities that impact rural education. I. Assess the level of parental and community involvement in rural areas.
4. Human resources for rural schools	<ul style="list-style-type: none"> A. Identify successful strategies for the recruitment of qualified personnel to rural schools. B. Identify successful strategies for the retention of qualified personnel in rural schools. C. Identify strategies that have been successful for releasing rural teachers from their classrooms for professional development. D. Identify successful leadership styles of effective rural school administrators.

(Continued)

Table 1 (Continued)

Major Topic	Area
5. Use of technology in rural schools certification mandates	<ul style="list-style-type: none"> E. Identify the strategies used by administrators to comply with the state certification mandates. F. Assess the impact of recent state certification mandates on teacher availability in rural schools. G. Identify effective beginning teacher mentoring programs for rural schools. A. Identify rural schools that have demonstrated effective use of advanced interactive instructional technology. B. Assess the impact of the advanced technology on rural school curriculum. C. Assess the effects of advanced technologies on traditional rural values of closeness, connection, or personal relationships in learning interactions. D. Assess the implications for instructional staff and support personnel who are implementing advanced technology in rural school communities. E. Identify the staff development strategies that have been most successful in helping schools, teachers, and support personnel embrace and integrate advanced technologies into their overall rural school system. F. Identify rural schools that successfully have implemented distance education via telecommunications. G. Conduct technology cost-effectiveness studies. H. Assess the level of private support for use of technology in rural schools. I. Identify innovative, low-cost alternatives to current programs delivered by telecommunications.
6. Financial support and governance for rural schools	<ul style="list-style-type: none"> A. Analyze the policies of school finance in rural communities. B. Identify alternatives to school consolidation for rural school communities. C. Assess how federal and state fund distribution formulas have impacted rural schools in their operations and course offerings. D. Assess the impact on rural schools of state school reform policies on course quality, diversity of course offerings, and student outcomes. E. Look at ways to equalize salary levels for teachers/administrators in rural schools compared to salary levels for those in large communities. F. Compare and contrast the roles and strategies of rural interest groups in the several school finance court cases in the states.

struct a broadly focused plan for research in rural education (or a single dissertation topic). The menu organizes the research priorities of a group of AERA members with a known interest in rural education in view of the initial work of the FICE committee. This history makes it worthy of consideration, and we believe that researchers, doctoral committee chairs, and doctoral candidates should find the menu useful.

The second question, arising from the first, concerns the integrity of the agenda. The menu represents a consensus derived from the perspectives of individuals with differing interests from different institutions. The topics and areas are not necessarily compatible with one another nor

are they necessarily of equal weight. Researchers and institutions must bring their own agendas and commitments to bear as they use the menu to develop a coherent plan of research, either for a program of research or for an individual's doctoral investigation.

The comprehensiveness of the menu is, of course, problematic. Some topics (e.g., overall effectiveness) were elaborated in numerous menu areas, while other topics (e.g., curricular provisions) received little elaboration. It would be wisest to interpret these differences as lack of depth and breadth rather than lack of importance. Topics not represented on the menu may be as important as those that, through some accident of participation, do not appear.

Menu developers suggested seven possible uses: (a) review the menu and involve rural educators, students, parents, and citizens to determine priorities for the topics and areas that reflect local, state, and national goals for education; (b) develop a strategic research plan for priority topics and areas that will maximize use of research results in rural school improvement; (c) form integrated, interdisciplinary research teams interested in working on rural education issues; (d) use Internet (or similar electronic networks) to facilitate a dialogue among educational researchers that focuses on high priority rural education topics and areas; (e) encourage teacher (and student) action research on topics and areas of the menu that hold promise for bridging the gap between educational research and practice in rural schools; (f) expand the synthesis and dissemination of research results on high priority rural education topics and areas to educational policy makers and practitioners; and (g) evaluate periodically the validity of the menu's topics and areas in the context of changing rural schools and communities.

Although not mentioned by developers, another application of the menu is the identification of doctoral dissertation topics. To facilitate such use of the menu, AEL researchers sought to conduct a review of dissertation abstracts to answer the following research question: To what extent have doctoral dissertations in education focused on the major topics recommended in the menu? Answering this question would give rural education scholars a view of recent efforts and could also inform future doctoral research. This effort was not, readers should note, intended to assess the *effect* of the menu on doctoral scholarship. Rather, we have used the menu to provide a framework for describing recent dissertations, which description could serve as a baseline for subsequent investigations.

Method

An electronic search of DAI was conducted to identify dissertations written between 1989 and 1993—the most recent 5 years for which dissertation abstracts were available in fall 1994—that focused on rural education. The *Agenda for Research and Development on Rural Education* was not published until 1991; the years 1989 and 1990 were included to provide a scope of 5 years for the review. The search strategy was designed to retrieve as many dissertations as possible in which both the phrases “rural education” or “rural school” appeared anywhere—title, indexing terms, or abstract.

Of the 205 dissertations initially identified, 8 were eliminated because they were actually masters theses.² One dissertation also was eliminated because it focused on an urban phenomenon (the author used the phrase “rural school district” as a contrasting term in the abstract).

Thus, 196 abstracts were judged as suitable for inspection by the panel of reviewers. Each of us independently reviewed the abstracts for each of the dissertations and determined which of the six major topics in the rural education R & D menu it addressed, if any.

Based on the information provided in the abstract for each dissertation, the researchers also determined which specific areas listed under each major topic were addressed. There was, in fact, comparatively little inconsistency about assignment to topics and only modest inconsistency about assignment to menu areas within topics. We met as a panel to reach consensus regarding the topics and areas represented across the 196 abstracts. Consensus was facilitated as we clarified the reasons for our assignments. Such clarifications provided scope for the negotiations that ended in agreement. We did not compute, nor did we collect information about, inter-rater reliability. The resulting classifications must be regarded as partly subjective.

Results

First, we consider descriptive information about dissertations and authors. Next, we examine the distribution of dissertations across the topics and areas of the R & D menu (Topic 1 = 121; Topic 2 = 25, Topic 3 = 27, Topic 4 = 36, Topic 5 = 17, and Topic 6 = 22).

Descriptive Information

The DAI resumes provide descriptive information of potential interest to scholars in rural education: name of author, type of degree, national setting of study, and length of dissertation. We inferred gender from authors' names and concluded that rural education doctoral recipients were almost evenly divided between females (49.5 %) and males (50.5 %). The division between the Ed.D. and Ph.D. degrees was nearly even (52.6 %; 45.4 % respectively) with 2% comprising other sorts of doctorates. Foreign dissertations—dissertations concerning other than North American education systems—were included in the relevant pool of resumes (19, or 9.7 %). Most dissertations, clearly, were North American, and most of these pertained to U.S. education. The length of dissertations varied from 74 to 923 pages; most (80%) were between 100 and 300 pages.

Distribution Across Topics and Areas

Based on the abstracts, we made 248 assignments to the menu. Some dissertations had to be assigned to more

²We eliminated masters theses because we believe they constitute a less significant body of scholarship and we did not have resources to make suitable case-by-case distinctions about the value of individual theses.

than one topic or area within a topic. Also, although all dissertations could be assigned to at least one topic, we could not agree on the assignment of 8 dissertations to any area within a topic. In these cases, the dissertation was simply assigned to the topic as a whole. Of the 196 dissertations, we agreed that most (152, or 78%) were adequately described by a single assignment.

We now turn to the topics, which we discuss in rank order based on the total number of assignments made to each area within the topic.

Overall school effectiveness. This topic received by far the most attention (121). This is not surprising in view of widespread concern about the "effectiveness" of education generally and the long-held belief that rural education is necessarily disadvantaged by circumstance (Sher, 1977; cf. Stern, 1994). This was also the topic with the largest number of menu areas (13).

Each of the 121 dissertations was also assigned an appropriate area within this topic. Of the 13 areas, 12 were judged to have been addressed by at least one dissertation. The most frequently addressed menu areas were:

- conduct evaluation studies of student achievement in rural schools (33)
- identify problems unique to the delivery of education in isolated rural communities in the following special populations: handicapped, disadvantaged, and gifted (17)
- understand the change process and extent to which change initiated in one part of school can encourage change throughout the school culture (16)
- improve access to educational opportunity in isolated rural communities (14)
- identify characteristics of effective rural schools (11)

The remaining areas within this topic were each assigned 8 or fewer times. Areas with the fewest assignments were:

- assess teacher education institutions' role in rural education (3)
- assess the degree to which rural schools are educating students for participation in a national economy versus a local economy (2)
- assess the ways in which rural school culture breaks down class distinctions or promotes increased cultural understanding (2)
- assess the role of rural schools in an "integrated services" approach to meeting community needs (1)

No dissertation was assigned to one area: assess the federal role in rural education.

Human resources for rural schools. This topic received 36 assignments: 32 to menu areas and 4 to the major topic only. Two areas received most of the assignments:

- identify successful leadership styles of effective rural school administrators (13)
- identify successful strategies for the retention of qualified personnel in rural schools (11)

Two menu areas received one assignment:

- identify strategies that have been successful for releasing rural teachers from their classrooms for professional development
- identify effective beginning teacher mentoring programs for rural schools

Two areas of the topic received no assignments: (a) identify the strategies used by administrators to comply with the state certification mandates, and (b) assess the impact of recent state certification mandates on teacher availability in rural schools.

School and community partnerships on behalf of rural schools. This topic, with nine menu areas, received 27 assignments (26 to areas and 1 to the topic as a whole). Of the 26 assignments to menu areas, more than half were made to a single area:

- identify the social and cultural issues of isolated rural communities that impact rural education (14)

The two areas with just one assignment were:

- identify effective school/community/private sector partnerships
- assess if Native American communities, or their learning environments, differ from other rural communities

No dissertations were assigned to three areas: (a) review legal procedures and issues pertaining to school and community partnerships on behalf of rural schools, (b) examine the factors of rural community economies that influence rural students' decisions to remain in school and graduate, and (c) assess the role of the rural school in promoting employability.

Curricular provisions in rural schools. This topic, with just three areas, received 25 assignments (17 to areas and 8 to the topic as a whole). The 17 assignments were distributed about equally among the areas of this topic:

- assess satisfaction of students, teachers, administrators, parents, and community leaders with current curriculum and instruction (7)
- provide adult literacy improvement in isolated rural communities (5)
- assess how state and federal curriculum development projects consider the needs of rural schools (5)

Financial support and governance for rural schools.

This topic, with six menu areas, received 22 assignments (18 to menu areas and 4 to the topic as a whole). Of the 18 assignments made to particular menu areas, all but one were made to the following three areas:

- identify alternatives to school consolidation for rural school communities (6)
- assess how federal and state fund distribution formulas have impacted rural schools in their operations and course offerings (5)
- assess the impact on rural schools of state school reform policies on course quality, diversity of course offerings, and student outcomes (6)

Finance policy analysis received only one assignment; salary equalizations and strategies of school finance litigation received none.

Use of technology in rural schools. This topic, with nine menu areas, received the fewest assignments among all six main topics. Only one menu area received as many as five assignments:

- assess the implications for instructional staff and support personnel who are implementing advanced technology in rural school communities (5)

No assignments were given to (a) identification of schools using advanced technology, (b) impact of technology on curriculum, cost-effectiveness studies, (c) level of private support, or (d) low-cost alternatives to current telecommunications.

Discussion

The effectiveness of rural schools receives the most attention in recent dissertation research. Most of the assignments made to this topic (91 of 121) concerned improving access, service delivery for special populations, characteristics of effective schools, student achievement, and school change. The keenest interest, then, was shown in topics that are well-represented in the educational literature generally and not simply within rural education.

We noted previously that the menu does not necessarily comprise all the topics that might be considered important by researchers. One possible measure of the adequacy of menu areas and topics is the ratio of assignments that could not be made to any menu area, but only to the major topic. Two topics stand out on this measure: curricular provisions (8/17) and technology (6/11). In both cases, nearly half as many assignments were generic as were specific.

Menu Areas Not Addressed

Seven areas of the R & D menu on rural education were not addressed by a dissertation written between 1989 and 1993. From this finding, we now consider specific suggestions for future doctoral research in rural education.

Role of rural schools in integrated services. A good starting point for exploring this topic from a rural perspective is the literature review by Bhaerman (1994). With the national emphasis on the role of the community in the education of children, this issue has received considerable attention in recent years. ERIC Digests by the rural and urban clearinghouses also provide perspective on this issue (Burnett, 1994; Lutfiyya, 1993).

Legal issues for rural school and community partnerships. Research might show that such partnerships have always existed in rural schools, and that only since urban schools have adopted (and popularized) this practice has it become a legal issue among educators generally. However, research might also show that partnerships in rural areas have developed under the influence of urban practices and have become less organic and more legalistic. The various state rural development councils would probably be excellent sources of data on partnerships in rural areas.

Factors of rural economics influencing graduation rates and rural schools' role in promoting employability. Establishment of school-to-work programs is likely to increase the importance of inquiries related to these two menu areas. Regional educational laboratories, such as AEL and the Northwest Regional Educational Laboratory, are involved in a variety of projects addressing implementation of school-to-work initiatives in rural places.

Alternative schooling programs in rural areas. As behavioral problems more typically associated with urban schools have found their way into rural schools, rural educators have responded with treatments adapted to rural settings. It would be important to document how effective such treatments are in the rural settings. The American Council on Rural Special Education is probably the best professional resource for information on this topic.

Strategies for providing release time for staff development. Since professional development is one of the major pillars of state and local education reform initiatives, professors and students should have little difficulty identifying sites for empirical studies.

State certification mandates and teacher availability in rural areas. Strategies for (a) meeting teacher certification mandates in rural areas and (b) assessing the impact of such mandates on rural teacher supply are two important areas of the menu not addressed. Studies related to either of these issues might be of sufficient interest to policy makers to secure funding for the researchers.

Implications

Researchers and practitioners can draw several implications from this report. Professors of methods courses could use the menu and the findings of this study to cultivate students' awareness of research trends and opportunities.

Journal editors, as well, might be advised to review doctoral research from time to time to identify prospective authors whom they might approach to solicit new manuscripts. Dissertation authors and advisers doubtless would prove receptive to invitations to submit articles. Editors, in fact, could routinely provide publication guidelines to authors and advisers of dissertations addressing rural education issues, and they could approach doctoral chairs to serve as reviewers and guest editors.

Education clearinghouses might be advised to create, on a regular basis, special collections of dissertation abstracts for entry into the ERIC database; AEL's Clearinghouse is currently pursuing this option, which requires the institutional cooperation of University Microfilm International (UMI); builder of Dissertation Abstracts International. UMI has, in fact, indicated its agreement in principal to such an arrangement, and staff are awaiting a final written agreement that would establish more routine input to ERIC than has previously been possible.

Because a substantial number of rural education dissertations are being completed by scholars outside the visible rural education network, the results should also be of interest to professional education organizations with rural constituencies. These organizations include the National Rural Education Association, the Rural Education Special Interest Group of AERA, the American Council on Rural Special Education, the Rural Sociological Association, the Rural Small Schools Division of American Association of Educational Service Agencies, the Rural Division of the National Association of State Boards of Education, and the American Association of Educational Service Agencies. These organizations could cultivate the participation of dissertation authors and advisers as association members, as presenters at association conferences, and as authors of articles in association publications.

For consumers of research, dissertations can be an unfamiliar and therefore unapplied resource. But with an average length of perhaps 150-180 pages, they are hardly "overweight," and surely their obscurity makes it difficult

to argue that they are "over estimated." It is clear to us that many useful and even insightful dissertations have examined rural education.

This investigation leads us to conclude that George Kneller's keen observations, with which we began this article, may not be perfectly apt. This could be cause for a small celebration, given the generally poor regard in which not only dissertations in the field of education, but more particularly the entire field of rural education studies, are held. Clearly, steps could be taken to make this unused resource more accessible, more applicable, and better understood.

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