SUPPORT SERVICES FOR AT-RISK STUDENTS IN RURAL SCHOOLS

SARAH M. BUNCH
SPRING 2013

A thesis
submitted in partial fulfillment
of the requirements
for a baccalaureate degree in Elementary and Kindergarten Education
with honors in Elementary and Kindergarten Education

Reviewed and approved* by the following:

Jacqueline Edmondson
Associate Dean for Undergraduate and Graduate Studies for the College of Education
Thesis Supervisor

Stephanie Serriere
Assistant Professor of Education (Social Studies Education) and Women’s Studies
Honors Adviser

* Signatures are on file in the Schreyer Honors College.
This paper explores six published articles, found through computer database searches and a hand-search of The Journal of Research in Rural Education, that examine the presence and effectiveness of support services for at-risk students in rural schools across the nation and world. Each of these studies identified a range of different support services that had a positive outcome on the achievement of special education students in rural school districts and how the lack of such services hindered student achievement. Three support services were prevalent throughout all six studies. These support services are the use of parental involvement, involvement in and connection between school and community activities, and the recruitment and support of highly qualified specialized teachers. This paper also discusses the implications for practice of each of these three support services in rural school districts.

Keywords: rural education, special education, support services, parental involvement, school involvement, highly qualified special education teachers, at-risk students
# TABLE OF CONTENTS

Chapter 1 Introduction ........................................................................................................... 1

Chapter 2 Methods .................................................................................................................. 3

Chapter 3 Results ................................................................................................................... 4

Chapter 4 Implications for Practice ....................................................................................... 9

Chapter 5 Conclusion .............................................................................................................. 14

Appendix A Literature Review Table .................................................................................... 15

REFERENCES ......................................................................................................................... 17
Chapter 1

Introduction

Support Services for At-Risk Students in Rural Schools

Rural education, although difficult to systematically define, refers to schools that are geographically isolated, located at least five miles from an urban cluster, and serve communities with small populations and population density (Semke & Sheridan, 2012). As of the 2009-2010 school year, there were approximately 7,000 schools, or over 50% of all school districts, in the United States, classified as rural districts (National Center for Educational Statistics, 2012). Although they make up over half of all the schools in the nation and contain over four million students, due to their isolation, rural school districts experience several challenges, including high teacher turnover, a high percentage of poorly prepared teachers, inadequate resources, and poor facilities (Semke & Sheridan, 2012). The high teacher turnover each school year results in the recruitment of under-qualified and poorly trained teachers, which, in turn, reduces the effectiveness of instruction (Weiss & Correa, 1996). Depending on the school district, these various challenges can result in lower graduation rates of students, declines in enrollment, and poorer performance on state-mandated tests (Barley & Wegner, 2010). This decline in performance ultimately results in a decrease in funding and perpetuates the challenges that rural school districts face (Barley & Wegner, 2010).

The passage of Public Law 94-142, now known as the Individuals with Disabilities Education Act, in 1975 presented another challenge to rural school districts by guaranteeing a free appropriate public education in the least restrictive environment for students with disabilities.
Due to inadequate resources and poorly trained teachers, rural schools face many obstacles in their attempt to implement special education services ranging from inclusion to pullout programs for at-risk students. The lack of funding in rural school districts, increase in poverty, and the number of students requiring special education services pose many concerns about budget constraints as well as the lack of information school districts are receiving to effectively implement such services. Therefore, rural school districts have been searching for resources to better serve the needs of at-risk students and students with special learning needs.

Despite the many challenges that rural school districts face, one of the main advantages of the location in such a geographically remote area is the opportunity for community involvement. Research has shown that because of their connections with the community, rural schools could have several advantages such as the establishment of social networks, increased parental involvement, support from agencies and businesses, and additional curricular resources (Hornby & Witte, 2010). Utilization of such community support could provide rural school districts with ways to overcome the challenges they face. However, the question of how to best utilize this support as well as its effectiveness for special education still remains. Therefore, this paper will examine the following questions: What support services could be implemented within the school and community to benefit families and at-risk students? How can these support services be successfully implemented to best meet the needs of at-risk students and encourage educational success?
Chapter 2

Methods

To obtain the articles for this paper, I systematically conducted searches using Internet databases such as ERIC and ProQuest Education. The main keywords that I used in the searches included: rural education, special education in rural school districts, parental involvement in rural schools, community involvement in rural schools, and special education support services. Studies included in the paper were published between 1975 and 2012 in order to examine research on the implementation of special education after the passage of Public Law 94-142 and in more recent years.

Due to the specific focus on special education in rural school districts, I also conducted a hand-search of The Journal of Research in Rural Education. During this search, I selected articles specifically addressing special education and at-risk students and examined them for the effectiveness of support services. I also used relevant articles included in the “References” section of select articles found in this journal for additional research on the topic. Overall, the search yielded six published articles pertaining to the implementation of special education in rural school districts as well as support services that resulted in positive outcomes for at-risk students.
Chapter 3

Results

The articles that I examined for this paper yielded different results and indicated several different support services that resulted in positive achievement outcomes for at-risk students in rural schools and examined how the lack of such services in rural schools would affect the at-risk student population. Three main support services that seemed to emerge from the research were parental involvement, student involvement in school activities and school-community connections, and recruitment of highly qualified teachers. Therefore, I will review the results of the studies as they pertain to each of the support services.

Parental Involvement

Due to school-community connections in rural areas, parents have the opportunity to have increased involvement in their child’s education. Therefore, several studies have examined this support service in rural areas. In a meta-analysis on family-school connections in rural settings, although limited by differences in what each study measured, Semke and Sheridan (2012) found that parental involvement has a small, but significant effect on student achievement and was not hindered by rural residence. However, due to lack of communication from school districts, level of parental educational attainment, and limited conceptions of parental roles, parental involvement in rural students’ education was limited (Semke & Sheridan, 2012). When parent support programs were developed by school districts, they saw increases in parent communication, number of parent volunteers, parental influence on
educational policy, attendance at Title I sessions, and student achievement (Semke and Sheridan, 2012).

Similar to Semke and Sheridan’s findings in their meta-analysis, Hornby and Witte (2010) found many of the same results in “Parental Involvement in Rural Elementary Schools in New Zealand: A Survey.” During this study, the authors surveyed 22 schools, with sample sizes ranging from 11-351 pupils, on four aspects of parental involvement, including parents’ potential contributions to the school, role as a resource, collaboration with teachers, and sharing information with children. (Hornby & Witte, 2010) The authors found in their results, that although 17 of the 22 schools included in the study had a Parent-Teacher Association (PTA), none of the schools had written policies on parental involvement and only a minority of parents were involved (Hornby & Witte, 2010). The majority of communication took place through newsletters and parent-teacher meetings twice a year, limiting the amount of involvement that parents had in their child’s education (Hornby & Witte, 2010). In regards to special education, only three schools reported the involvement of parents in student Individualized Education Plan (IEP) meetings, which decreased the amount of information shared about children’s special needs through the IEP process (Hornby & Witte, 2010). Besides informal parent-teacher meetings, the limited amount of opportunities for parents to become involved in students’ education resulted in schools ineffectively utilizing parental involvement as a support service for students (Hornby & Witte, 2010).

School and Community Activities/Support

Another facet of the increased school-community connections in rural areas is the opportunity for students to become engaged in school and community activities. A study conducted by Irvin, Farmer, Leung, Thompson, & Hutchins (2010) examined the participation of students in school and community activities and the effect on academic achievement and
interpersonal competence. In this study, the authors used a multi-method survey design, teacher reports, school record data, and parent interview data to examine the participation of 280 students, 99% of which were African American, from two rural counties in North Carolina (Irvin et al, 2010). Through the use of student self-report data on participation in school and community activities as well as student grades, the authors found that participation in school and church activities had a positive association with achievement and interpersonal competence, meaning that participants who were more involved in school and church activities had higher achievement and interpersonal competence (Irvin et al, 2010). However, the results for participation in community activities indicated that involvement in community music and sports activities was related to lower achievement and lower interpersonal competence (Irvin et al, 2010).

The authors also tested for gender differences in this study to examine whether the gender of the student affected academic achievement or interpersonal competence (Irvin et al, 2010). They found that, although girls were more likely to be involved in vocational activities while boys were more likely to be involved in sports activities, both genders experienced higher achievement and interpersonal competence with higher involvement in school activities (Irvin et al, 2010).

From the results of this study, the authors concluded that participation in school and church activities yielded higher achievement and interpersonal competence in school (Irvin et al, 2010). They also concluded that sources of support outside of the family, school, and peers could be helpful for at-risk African Americans in rural areas (Irvin et al, 2010). Therefore, they suggest that future investigation should be done on participation in extracurricular activities as well as intervention programs as a way to promote the school adjustment for at-risk students from rural, low-income communities (Irvin et al, 2010).

An article entitled “Case Study of Leadership Practices and School-Community Interrelationships in High-Performing, High-Poverty, Rural California High Schools”, which is a
case study of three rural schools in California, provides additional support for the positive relationship between involvement in school activities and achievement. (Masumoto and Brown-Welty, 2009). Masumoto and Brown-Welty (2009) found that one of the three contributors to success in the studied schools was the variety of school activities that were provided for students with varied needs, including one-on-one tutoring services, personalized academic planning, and college counseling. These school activities and services served as ways to overcome the disadvantages of poverty and rural circumstances (Masumoto & Brown-Welty, 2009).

Contrary to the findings by Irvin et. al (2010), Masumoto and Brown-Welty (2009) found that successful rural schools formed formal linkages between their district and the community, including connections that provided college access information, vocational education opportunities, and financial resources. In addition, leaders of these successful schools formed informal linkages with the community through the implementation of career education programs such as Future Farmers of America (FFA) as well as encouraging involvement in and support of sporting events, concerts, fundraisers, and other school activities (Masumoto & Brown-Welty, 2009). These community linkages, as well as student participation in community service, benefited both the students and school districts by providing opportunities for education and encouraging achievement (Masumoto & Brown-Welty, 2009).

**Recruitment and Support of Highly Qualified Teachers**

In a study entitled “Challenges and Strategies for Early Childhood Special Education Services in Florida’s Rural Schools”, authors Weiss and Correa (1996) utilized a DELPHI panel in which panelists received two rounds of questionnaires to identify problems facing rural education service providers as well as modifications that would improve services for children with special needs. The results of this study showed that 80% of the panel saw the increase of collaboration between teachers and local administration in developing goals, objectives, and plans
for Pre-K programs as “Very Important” when identifying the challenges of and improvements that could be made to Early Intervention Services in Florida (Weiss & Correa, 1996). In addition, 79% of the DELPHI panel indicated that providing incentives for highly qualified teachers to teach in rural counties was “Very Important” to improving the early intervention services provided to children with special needs in Florida schools (Weiss & Correa, 1996).

To further support the importance of highly qualified teachers, in a qualitative research entitled “Case Study of Leadership Practices and School-Community Interrelationships in High-Performing, High-Poverty, Rural California High Schools”, authors Masumoto and Brown-Welty (2009) found that effective teachers were one of the most direct influences on student achievement. They also found that although each of the three schools faced challenges with recruitment and retention of teachers, the enforcement of clear expectations and rules as well as the provision of direct guidance through observations and feedback allowed all three of the schools to recruit and retain highly-qualified teachers (Masumoto & Brown-Welty, 2009).
Chapter 4

Implications for Practice

Limitations and Research Patterns

When conducting research for this topic, I faced challenges in finding experimental studies that examined the implementation of support services for special education in rural areas. One of the main explanations for this challenge is the lack of a systematic definition of rural education. As stated by Semke and Sheridan (2012) in their meta-analysis on family-school connections in rural educational settings, research in this area lacks a commonly accepted definition of “rural”, which results in studies utilizing a rural sample, but not purposefully aiming to answer a rural education question. Therefore, when conducting research for such a topic, the authors did not necessarily use the same definition of “rural”, which resulted in each of the studies testing a different sample of the population, making it difficult to synthesize the information into accurate results.

In order to make more effective comparisons between studies, more research should be conducted to systematically define rural education. Currently, there is a not a widely accepted definition of “rural education”, which results in an inconsistency of samples used in the studies that are conducted. In order to define rural education, researchers should review quantifiable factors such as number of students, geographical surroundings and population, and amount of funding a school receives to determine benchmarks that qualify a school district as rural. Also, researchers should account for factors that are more difficult to quantify such as a school’s connection to the land and environment and the sense of community within the area as a way to create a complete picture of rural education. This precise definition of “rural education” would
help make the research more effective as well as make it plausible to synthesize results of different studies. Ultimately, this would give the findings of each research study firm support and make them more applicable to rural school districts.

Due to the nature of the topic I researched, all of the studies I found, with the exception of two articles, were descriptive and qualitative in nature and had very little experimental support. Such research creates a snapshot of the conditions in rural educational settings, providing opportunities to consider conditions and services that may be appropriate in other rural communities and schools. Due to the unique location and the preservation of a sense of “place” in rural schools, experimental research and random assignment are nearly impossible. In rural areas, students are faced with limited choice in school districts and attend schools based on where they live, which makes random assignment difficult, if not impossible, to achieve. Even if control groups in rural school districts could be used, it would require at-risk students to potentially miss opportunities critical to their educational development, which would ultimately limit the effectiveness of support services. Therefore, conducting research on the aforementioned support services with control groups could prove to be detrimental, rather than beneficial, to at-risk students.

In addition to the impossibility of random assignment, another design problem that accompanies further quantitative research into this topic is the number of at-risk students available for research samples. In order to effectively generalize results of quantitative research studies across rural school districts, the sample size would have to be large enough to produce significant results for each of the support services. However, because of the small number of students in both rural schools and special education, opportunities to produce large sample sizes are limited, which in turn, limits the generalizability of the results.

Although conducting rigorous experimental research on support services for at-risk students in rural schools seems beneficial in theory, several research design issues could prove to
be detrimental to further research on this topic. Therefore, although case studies only involve one type of place, including classrooms, school districts, or communities, at a time and do not initially promote generalizability, they currently prove to be the ideal research method to measure the effectiveness of support services in rural school districts. As demonstrated by Irvin et. al (2010) in their case study of a rural school district in North Carolina, this type of research can truly capture the effects of support services on students in rural areas. Based on what has been shown by current research, the use of case studies will ultimately preserve the sense of place that is crucial to rural schools and allow all at-risk students to benefit from each of the support services. Currently, qualitative research on special education and support services in rural school districts has been minimal; however, if more research is conducted using case studies, school districts in rural areas can take the necessary steps to benefit all of their students in the most effective way possible.

*Parental Involvement*

The results of the several studies conducted on parental involvement found a lack of communication between schools and districts, resulting from the nonexistence of a written Parental Involvement (PI) policy, parents’ lack of involvement in the IEP process, and poor organization and knowledge of such a program (Hornby & Witte, 2010; Semke & Sheridan, 2012). Therefore, because parental involvement has shown to have a slightly positive effect on student achievement, school districts in rural areas should focus on the creation and implementation of a PI policy to organize and increase parental involvement. Such a policy should include information on how parents can contact the school about their child’s academic needs to encourage open communication, provide support and guidance on student learning and behavior, and utilize strategies to include diverse parents. Teachers should be trained on such a
policy as a way to increase the effectiveness of parental involvement, so it ultimately results in a positive effect on student achievement.

**School and Community Activities/Support**

As concluded by Irvin et al (2010) and Masumoto and Brown-Welty (2009), involvement in school activities as well as connections with the community results in positive achievement outcomes for students in rural areas. In terms of implications for practice, this finding affirms the notion that there is additional support for students outside of family, peers, and school (Irvin et al, 2010). Therefore, leaders of rural school districts should work to provide extracurricular activities for students and encourage their participation in the community by providing opportunities to be involved in community-wide projects. In addition, schools should take advantage of rural school-community connections and form both formal and informal linkages with local businesses, agencies, and parents as a way to provide resources for at-risk students that might not otherwise be available to them. This availability of resources, ranging from college counseling to extra-curricular activities, would ultimately benefit the students and increase academic achievement and interpersonal competence.

**Recruitment and Support of Highly Qualified Teachers**

Due to their geographic isolation, many rural school districts face challenges in recruiting and retaining highly qualified teachers. Since studies have shown that highly qualified, strong teachers promote academic achievement for at-risk students, it is essential to recruit and retain such teachers for rural school districts (Masumoto & Brown-Welty, 2009). In terms of the recruitment process, states should prepare pre-service teachers to teach in rural settings during teacher preparation programs as one way to ensure highly qualified teachers. In addition, once a prospective teacher has decided to teach in a rural area, it would be beneficial to provide
incentives, such as loan forgiveness, to encourage more graduates to teach in under-represented areas.

Once teachers have been recruited, it is then essential for school districts to implement policies to retain their highly qualified teachers. In order to do this, leaders of rural school districts should offer support by setting clear and direct expectations, training teachers on instructional materials and curriculum, and providing feedback through observations (Masumoto & Brown-Welty, 2009). By providing this type of support and direction, it would reassure teachers of their effectiveness and emphasize the importance of open communication, collaboration, and organization within the school district. This collaboration would ultimately shift the focus from organizational goals to the learning needs of all students.
Chapter 5

Conclusion

After extensive research on the topic, I was able to address my question by finding three major support services that would benefit at-risk students in rural school settings. However, as stated by many of the studies, more extensive research must be conducted using case studies in order to successfully capture the unique sense of place and community found in rural school districts. If this research is conducted, the needs of at-risk students in rural schools can be better addressed, which will allow them to make the gains necessary to succeed in rural schools. In addition, by implementing support services in and outside of schools, the communities surrounding the schools would serve as great resources for the students to overcome the many challenges associated with rural geography and receiving their education from schools that are often overlooked and underfunded. Ultimately, if rural schools could increase parental involvement, participation in community and school activities, and recruit highly qualified teachers, they could distinguish themselves as top-ranked places to receive an education.
### Appendix A

#### Literature Review Table

<table>
<thead>
<tr>
<th>Article</th>
<th>Research Question</th>
<th>Sample</th>
<th>Methods</th>
<th>Results</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Involvement in New Zealand (2010)</td>
<td>Which aspects of PI are widely used by rural elementary schools? What are the weaknesses and implications for practice?</td>
<td>22 elementary schools (3 one-teacher schools, eight elementary schools, ten full elem. Schools, one Area school)-mean of 127 pupils, range of SES, more with above average SES</td>
<td>Surveyed 22 schools on 4 aspects of PI connected to parents’ potential contributions to the school and 3 aspects connected to parents’ needs</td>
<td>Majority of schools had active PTAS. No schools had written policies on PI. Parents informed by school newsletters, letters sent home, parent handbook. Collaboration with teachers during parent-teacher conferences. ONLY 3 schools had parents participate in IEP meetings. No schools reported about children’s special needs at IEP meetings. Invitation to join support groups in newsletters—not high on agenda. No strategies for dealing with diverse parents. Ten of 22 schools had parents fully involved in IEP process/parents attended meetings.</td>
<td>Written PI policies should be discussed with parents. Use of home visits? Innovative ways involve diverse parents. Provide support and guidance to parents about learning and behavior. Comprehensive PI system run by trained professional. Parents fully involved in IEP process. Home-school diaries for frequent, effective communication. Teacher training for PI. Need larger studies to increase generalizability.</td>
</tr>
<tr>
<td>Challenges and Strategies for Early Childhood Special Education Services in Florida Rural Schools (1996)</td>
<td>What are the problems facing special education providers that hinder their ability to provide education for children ages 3-5 with disabilities? What modifications could improve the services?</td>
<td>27 counties in Florida-21 in North Florida and 6 in South Florida. 14 counties selected from stratified sample. Final panel was composed of 14 program administrators and 13 teachers. Panel received two questionnaires to identify problems and possible modifications/solution statements.</td>
<td>DELPHI technique-anonymous panel interaction, series of questionnaires, presentation of statistical data.</td>
<td>Challenges- Parental child care skills and knowledge, finding and keeping experienced providers, lack of funding, and limited parental involvement. Strategies- implementation of parent liaison program, family counseling services, developing funding mechanisms to attract experienced service providers, and decreasing student-teacher ratio.</td>
<td>Recruit teachers to teach in rural areas. Prepare pre-service teachers for education in rural settings and give them incentives to teach in rural areas. Support outreach efforts by social service agencies. Implement service delivery program for families. Provide inservice professional development via distance education. Link families to service providers via distance education.</td>
</tr>
<tr>
<td><strong>Article Title/Year</strong></td>
<td><strong>Research Question</strong></td>
<td><strong>Sample</strong></td>
<td><strong>Methods</strong></td>
<td><strong>Results</strong></td>
<td><strong>Implications</strong></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------</td>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>An Examination of the Provision of Supplemental Educational Services in Nine Rural Schools (2010)</td>
<td>Extent to which school and district personnel valued SES programs Relationships established with service providers Outreach to parents Barriers to service delivery including transportation problems, lack of Internet access, lack of trust in outsiders, and logistical barriers</td>
<td>Nine rural schools in the High Plains States – 3 elementary schools, 3 middle schools, and 3 high schools</td>
<td>Researcher visited one of the nine schools and conducted interview data with the superintendent, teacher who had students in the program, and program tutors Cross site analysis was used to provide answers to the research questions based on the four variables</td>
<td>Three factors were indicated as successful in enabling student participation in SES: belief in the value of the program, close relations with the providers, and reaching out to parents Each school faced barriers to implementing because of distance to a provider, lack of high speed Internet access, parent misunderstanding of services, or discomfort with unknown teachers</td>
<td>Adaptations must be made with the SES programs for a variety of school conditions especially in rural areas Possible ideas: increase in state funding</td>
</tr>
<tr>
<td>School, Community, and Church Activities: Relationship to Academic Achievement of Low-Income African American Early Adolescents in the Rural Deep South (2010)</td>
<td>Examination of participation in school, community, and church activities as measured by a total sum score which captures the number of activities students are involved in across each of these contexts What is the relationship between participation in specific types of activities across several contexts and academic achievement?</td>
<td>208 students (177 girls and 103 boys) in the 7th and 8th grades of two public middle schools in North Carolina</td>
<td>Students completed self-report measures via a survey to indicate types of activities they participated in: religious, music, hobby, sports, academic, vocational, and student government Teachers completed rating forms on participants Phone interviews were used to collect parent data: family involvement and family economic hardship Student grades were obtained from school records to measure academic achievement Results were dummy coded: if students participated in an activity, it was given a value of 1. If not, it was given a value of 0 Hierarchical multiple regression analysis was used to determine if activities were a predictor of academic achievement</td>
<td>Participation in school and church activities had a positive association with achievement and interpersonal competence. Participation in church activities exposes students to sources of support outside of the family, school, and peers Results did not support the contention that the community may provide activities that can additionally support adolescents—may be due to the severe poverty</td>
<td>More research needs to be done with longitudinal designs or involve applied research with experimental or quasi-experimental control group designs Need to further examine the relationship between participation in school, community, and church activities and achievement</td>
</tr>
</tbody>
</table>
REFERENCES


ACADEMIC VITA

Sarah Bunch

sarahmbunch@gmail.com

Education

B.S., Elementary and Kindergarten Education, 2013, The Pennsylvania State University, University Park, PA

M.Ed., Special Education, 2013, The Pennsylvania State University, University Park, PA

Honors and Awards

- Schreyer Honors College Undergraduate and Graduate Scholar, The Schreyer Honors College, August 2008- May 2013
- Pi Lambda Theta Honor Society Member, Pi Lambda Theta Honor Society, September 2010
- Phi Eta Sigma Honor Society Member, Phi Eta Sigma Society, January 2010
- Bayard D. Kunkle Scholarship, The Pennsylvania State University, August 2012
- Lindquist Trustee Scholarship, The Schreyer Honors College, August 2012

Research Interests (usually for graduate applicants and prospective professors)

I have broad interests in rural education, particularly the state of special education in rural areas. Specifically, I am interested in the implementation of support services for at-risk students and student with disabilities and their families in rural locations.
Publications and Papers