DOCUMENT RESUME

ED 258 785 RC 015 367

AUTHOR Horn, Jerry G.
TITLE Recruitment and Preparation of Quality Teachers for Rural Schools.
INSTITUTION Department of Education, Washington, DC.
PUB DATE Aug 85
NOTE 48p.; Paper presented at the National Rural Education Forum (Kansas City, MO, August 12-14, 1985). For related documents, see RC 015 364-372.
PUB TYPE Information Analyses (070) -- Speeches/Conference Papers (150) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Community Characteristics; Elementary Secondary Education; Higher Education; Job Satisfaction; Rural Areas; *Rural Education; *Rural Schools; Rural Urban Differences; *Teacher Education; Teacher Education Curriculum; Teacher Education Programs; *Teacher Morale; Teacher Qualifications; *Teacher Recruitment; Teacher Salaries; Teacher Student Ratio; *Teacher Supply and Demand

ABSTRACT

Perceived negative aspects of teaching in rural areas, including personal and professional isolation, multiple subject preparation, etc., provide barriers to effective recruitment and retention of quality teachers. The predicted shortage of teachers will likely have a significant impact on an already competitive market for high quality, rural school teachers. Recommended actions to overcome these perceived problems include more aggressive recruitment of new graduates from colleges and experienced teachers from larger schools, better selling of the advantages of teaching in rural schools--such as class size, individualized instruction, etc.--and utilization of more skilled and experienced recruiters. Politics and factors related to certification and accreditation regulations auger against developing unique approaches to teacher education. With increased emphasis on specialization, the preparation of teachers for rural schools is made even more difficult. Using the strengths of rural schools and proven effective teaching techniques in conjunction with field experiences, quality rural teacher education programs are possible. Reconceptualization of school curricula could provide the leverage for teacher educators to develop alternative preparation programs. Concluding the paper are eight recommendations directed at program and policy decision-makers in state and federal governments, local schools, and college/universities. (Author/PM)

Recruitment and Preparation of Quality Teachers for Rural Schools

Jerry G. Horn
College of Education
Kansas State University
Manhattan, Kansas 66506

National Rural Education Forum

Recruitment and Preparation of Quality Teachers for Rural Schools

Jerry G. Horn
College of Education
Kansas State University
Manhattan, Kansas 66506

A paper prepared for the U.S. Department of Education Forum, Kansas City, Missouri, August 12-14, 1985.

The subject of this publication was supported in whole or in part by the United States Education Department. The opinions expressed herein do not necessarily reflect the position or policy of the United States Education Department; no official endorsement by the United States Education Department should be inferred.

Abstract

Rural schools are characterized by unique institutional and community factors. Perceived negative aspects of teaching in rural areas, including personal and professional isolation, multiple preparations, etc., provide barriers to effective recruitment (and retention) of quality teachers. The predicted shortage of teachers will likely have a significant impact on an already competitive market for high quality teachers. Recommended action to overcome these perceived problems include more aggressive recruitment of new graduates from colleges and experienced teachers from larger schools, better selling of the advantages of teaching in rural schools, such as smaller class sizes, individualized instruction, greater parental support, etc., and utilization of more skilled and experienced recruiters.

Politics and factors related to certification and accreditation regulations auger against developing unique approaches to teacher education. With increased emphasis on specialization, the preparation of teachers for rural schools is made even more difficult. Using the strengths of rural schools and proven effective teaching techniques in conjunction with extensive field experiences, quality rural education programs are possible. Reconceptualization of school curricula could provide the leverage for teacher educators to develop alternative preparation programs.

Recommendations for decision-makers in state and federal governments, local schools and college/universities are provided.

Recruitment and Preparation of Quality Teachers for Rural Schools

Jerry G. Horn
College of Education
Kansas State University
Manhattan, KS 66506

Introduction

The purpose of this paper is not to romanticize rural schools and rural communities or to recount the good days of long ago. Leaders who have identified with rural education have gone far beyond this, and it is time for a realistic look at schools and schooling in one identifiable segment of society. In this case, attention will be given to the recruitment and preparation of quality teachers for rural schools.

The phrase rural schools or rural education is used as if there is a common understanding among educators, researchers, decision-makers in state and federal governments, and society in general. As defined in the 1980 Census, the rural populations comprises all persons living outside urbanized areas in the open country or in communities with less than 2,500 inhabitants, and those living in areas of extended cities with a population density of less than one thousand inhabitants per square mile. While this may be a convenient operational definition for categorizing numerical data, it does little to give one the sense of either the common or unique characteristics of rural schools or schools that serve rural communities. Paul Nachtigal (1982, p. 274) provided a very useful scheme of perceiving categories of rural communities.

Categories of Rural Communities

	Values	Socio-economic factors	Political Structure/ locus of control	Priorities for schools
I. Rural poor	Traditional/ commonly held	Fairly homo-geneous/ low income	Closed, con centrated, often lie outside local community	Mixed and low
II. Traditional Middle America	Traditional/ commonly held	Fairly homo-geneous/ middle income	More open widely dis-persed	High
III. Communities in transi-tion	Wide range represented	Wide range/ low to high income	Shifting from "old" timers" to "newcomers"	Wide range, resulting in school being battleground

As one develops a backdrop for looking at the "recruitment and prep-aration of quality teachers", it is necessary that one understands the type of community for which they are being recruited and prepared. Even with the careful thought and analyses employed by Nachtigal, the scheme is not perfect. However, typical examples of each can be found across the country. Certainly, Rural Poor communities are found in the desert and semi-arid areas of New Mexico, the Indian reservations of South Dakota, the Upper Pennisula of Michigan, the Appalachia of West Virginia, the island communities off the coast of Maine and in the Deep South. Communities representing Traditional Middle America communities are found in Vermont, Iowa, Kansas and every other state. With the expanding boundaries of cities into and around traditionally

small towns, the emergence of resort/recreation areas in places like Aspen, Colorado, and commuters' acceptance of greater acceptable distances to jobs, many communities could be identified as in Transition, the third category of Nachtigal's scheme. Nachtigal (1982, p. 270-271) concluded:

> "The important factors that differentiate a rural community in one part of the country from a community of similar size and isolation in another part of the country appear to be related to (1) the availability of economic resources, (2) cultural priorities of the local community, (3) commonality of purpose, and (4) political efficacy."

The apparent lack of homogeneity in location, size, ethnic composition, values, etc., has frustrated those who wish for conformity and simplicity in dealing with entities of our society. Others could (and should) look to schools in these communities as opportunities to redefine the roles of teachers and to reconceptualize education, as well as recognition of the obligation of society to provide the best education possible for all students.

While there are numerous characteristics of rural schools, Jonathan Sher (1977) identified unique features that defy quantitative analysis or statistical description. Among these features are the following:

- slower pace and less pressured environment
- spirit of cooperation
- opportunities for leadership and development
- less formal interaction among students, staff and parents

Discussions of rural schools inevitably include references to comparisons with urban schools, which have of course received the lion's share of attention for at least the last twenty years. In

Nachtigal (1982, p. 270) the following differences between rural and urban characteristics were identified.

Rural	Urban
Personal/tightly linked	Impersonal/loosely coupled
Generalists	Specialists
Homoegeneous	Heterogeneous
Nonbureacratic	Bureaucratic
Verbal communication	Written memos
Who said it	What's said
Time measured by seasons of the Year	Time measured by time clock
Traditional values	Liberal values
Entrepreneur	Corporate labor force
Made do/respond to environment	Rational planning to control environment
Self-sufficiency	Leave problem solving to experts
Poorer (Spendable income)	Richer (spendable income)
Less formal education	More formal education
Smaller/less density	Larger/greater density

Over the past forty years, the number of school districts in the U.S. has declined. Lawrence Davenport (1983) as Assistant Secretary for Elementary and Secondary Education of the U.S. Department of Education, speaking at the Joint Meeting of the Rural Education Association and the Fifth Annual Rural and Small Schools Conference at Kansas State University, said "...since World War II, the number of school districts has fallen sharply from over 100,000 to approximately 15,000 in 1983. This decline resulted primarily from consolidations of small systems and reorganizations of districts within states" (pp. 7-8). He goes on to point out that, even with the massive reduction in the number of districts and a resulting concentration of more students in fewer districts, fifty-four percent of the nation's school districts have less than 1,000 students while only four percent have more than 10,000. Obviously, Davenport relied almost entirely on numbers (number of districts and number of students per district) in this discussion, which is only one consideration in addressing the

needs of schools serving rural communities. However, he offered a very interesting and useful prediction/observation.

> Of all the statistics that one could cite relative to the general context for rural education, it is possible that two are most important: (1) the traditionally rural states will be the American states that will grow the most rapidly in population during the 1980's, and 2) the populations within all states will become more rural in nature. (p. 8)

The question of whether further consolidations should occur is raised over and over in almost every state. Governors and legislators struggle with financial considerations, and the largest single item in state budgets is education. One inviting presumed solution to budgetary problems is to engage in a second or third generation of consolidations, often shrouded behind the pretense of improving schools and education. The consequences of such actions go far beyond financial matters, including the almost certain death of many small towns and communities. Any reasonable person surely must recognize the negative results of excessively long bus rides for students, as well as the certain reduction of the support and involvement of parents in the schools. The emotions surrounding threats of school closings and consolidations run high. In Iowa, a grassroots organization, known as People United for Rural Education (PURE), is but one reflection of the concern and pride for local schools found in the rural areas of this country. There is little empirical evidence to establish optimum school size. Weldon Beckner (1983) suggests the use of common sense, observations and logical reasoning for evidence about the values of education in small schools. Sher (1977) discussed the myths related to economy, efficiency, and equality which presumably result from consolidation. In each area, he discussed

several examples reflecting claims for larger schools. However, we must not forget that rural schools are not of one form, and generalizations about the benefits of either small or large schools are risky at best.

This introduction provides a backdrop for the discussion that follows related to the recruitment and preparation of quality teachers for rural schools. Within the context of these observations, a summarization of knowledge, practice, trends and suggestions for action will be presented.

Recruitment of Quality Teachers

The notion of effective recruitment can be reasonably discussed only in relationship to retention of existing teachers and the need for new teachers. Currently, there is concern in many circles about an impending teacher shortage. Probably the most often cited source of teacher supply and demand data is an annual report by James Akin and sponsored by the Association for School, College and University Staffing (ASCUS). In the 1985 report (Akin, 1985), teaching fields with considerable teacher shortage and comparison data for 1985 and previous years are cited.

Ratings by Teacher Placement Officers*

	1985	1984	1983	1982	1981	1980	1976
Mathematics	4.71	4.78	4.75	4.81	4.79	4.80	3.86
Science-Physics	4.57	4.45	4.46	4.41	4.56	4.28	4.04
Science-Chemistry	4.42	4.25	4.30	4.13	4.42	4.18	3.72
Computer Programming	4.37	4.34	-	-	-	-	-
Data Processing	4.30	4.18	4.36	3.86	-	-	-

*5 = Greatest Demand, 1 = Least Demand

Areas cited in the same report with "considerable surplus" or "some surplus" are physical education, art, health education, social science, elementary-intermediate and elementary-primary. Other historical and projected data about estimated supply and demand for additional teachers are reported by the National Center for Education Statistics (1984). Portions of these data are shown below.

Fall of Year	Supply of New Teachers Graduates	Demand for Additional Teachers	Ratio of Supply to Demand
1972	317,000	179,000	1.77
1975	238,000	186,000	1.28
1978	181,000	138,000	1.31
1981	141,000	110,000	1.28
1984	146,000	142,000	1.03
1987	142,000	160,000	0.89
1990	139,000	183,000	0.76

According to Gosman (1985), it is generally expected that the demand for secondary teachers will continue to decline until 1990, but the demand for elementary teachers should continue at least through the early 1990's. This conclusion was based on the predicted number of school-age children and youth, expected teacher retirements and the number of persons preparing for careers in teaching. Probably not even considered in these calculations is the effect of competency tests for teachers. Some will not pass, and some will choose to prepare for other careers because of the "hassle" and the uncertainty of eligibility to enter the profession.

The data reflecting teacher supply and demand may not be alarming to most and may be of little concern to others. However, these data are generalized across the nation for all types and sizes of schools, not merely rural and small schools. It is generally

conceded that in rural schools teacher turnover is greater, certification to teach is needed in two, three or even more areas, and the attractiveness of teaching may be less in an area where one perceives personal or professional isolation, lower salaries, and lack of opportunity for professional development and advancement. In total, the expected teacher shortage will very likely have considerable more impact in rural communities than in suburban or urban areas.

Gosman (1985, p. 47) listed seven reasons for the decreasing supply of teachers.

- Diminishing student interest in teaching,
- Poor public image of the teaching profession,
- Low salaries for teachers compared to other occupations,
- Poor working conditions,
- Absence of opportunities for career advancement,
- Expanded career opportunities for women in other occupations, and
- Adverse effects of regulations (such as competency testing) to improve teacher quality

Conceivably, all of these could be valid for a person considering a teaching career in rural areas. However, there may be some notable exceptions. In a relative sense, teachers are often paid well and held in high esteem in some rural communities, working conditions are satisfactory, and there are fewer opportunities for other professional employment for women. Several states have been concerned with the problem of teachers leaving the profession. Although becoming less and less true, many female teachers have characteristically left the profession to start families or care for children, follow male spouses to other employment locations and/or seek reduced employment commitments. Other reasons, more generally true of all teachers, were

identified in Kansas by Carlberg (1981) and confirmed by LaShier, Hefley, and Rzoa (1982). In both studies, "lack of administrative support" and "inadequate financial remuneration" were cited as most instrumental in educators' decisions to leave the profession. Horn (1983) probed for specific meaning of these two broad categories. Gleaned from the literature, administrative evaluation instruments and input from educators (teachers and administrators), twenty-seven (27) specific behaviors were identified and submitted to a random sample of 400 Kansas teachers. Of the 236 respondents, almost 45 percent taught in schools of less than 600 students. Also, 18.2 percent stated an expectation that they will leave the profession within the next five years. Of the twenty-seven areas of administrative support, all but one were rated as "Important" or "Very Important" (> 4.0 on a five point scale) which reflects a measure of validity for the emphases of the items. None were perceived as being "Adequately" or "Very Adequately" (> 4.0 on a five point scale) provided by administrators for the teacher respondents in their current school of employment. The most important factors of administrative support for teachers planning to leave the profession differed significantly from those who expect to remain in the profession for five or more years. Described in general terms, they are:

- accessibility
- support in dealing with students
- input on budget matters
- evaluation of teachers
- receptivity to problems
- equitable distribution of extra duty assignments

Clearly, salary considerations were perceived as the most important form of remuneration.. Amount of salary increments for experience and educational degree steps were preferred far more than other forms of remuneration or assistance, such as availability of aides/secretarial support, sabbatical or educational leaves with salary, and extra pay for additional duties.

A profile of Utah teachers leaving the profession was developed by Allred and Smith (1984). Thirty of the forty school districts in Utah were identified as rural for the purposes of this study. They found that 19 percent of the teachers in rural schools left Utah school districts during and at the end of the year of this study, compared to only 9 percent of their counterparts in urban districts. The reasons most often cited for leaving the district were salary (37.8%), maternity (17.6%), moved from the area (12.0%) and new employment (11.6%). Most of the secondary teachers who left the profession were in the critical areas of mathematics, English, home economics, and science, all subject areas where recruitment is very difficult, according to these researchers. Also, they found the least experienced (four or fewer years) were the most likely to leave rural schools. "Seemingly, the rural district has become a training ground for new teachers" (p. 5).

Obviously, there is sufficient evidence to substantiate a need to be more effective in retaining teachers in rural schools and to be able to recruit new teachers in a marketplace that will become more and more competitive as the demand for teachers exceeds the supply, especially in certain critical areas, i.e. mathematics, physical sciences, etc. From the local district administrator's point of view,

the most often cited unique problem confronted by educational leaders in rural communities in South Dakota was maintaining a quality staff of teachers (Moriarty, 1981).

> The administrators termed this problem unique in terms of obtaining teachers who are oriented to the rural context. Although salaries were assessed critical, the larger problem is obtaining committed personnel who can effectively deal with geographic isolation, population sparsity, and the essential "community-fit" to the life style and expectations of rural communities. (p. 2)

While retention and recruitment are closely intertwined in the arena of providing quality teachers for schools, the following portion of this paper will deal more specifically with recruitment. Generally, the blame, if that is the proper word, for rural schools being less competitive in recruiting teachers has been placed on:

- excessive instructional demands of multiple subject areas (grade levels)
- undesirable characteristics of communities (geographic, personal, cultural and professional isolation, inadequate/ unsatisfactory housing, etc.)
- low salaries
- lack of opportunities for professional development and advancement
- inadequate (unrealistic) preparation in college for teaching.

Certainly, there are considerations for prospective teachers, but do these override the positive aspects of teaching in rural areas?

Miller and Sidebottom (1985) have said -

> Positive features such as relatively small classes, few discipline problems, opportunities for independent teaching and decision making, and the lower cost and enjoyable pace of living have not been promoted enough by rural educators. (p. 3)

Faith Dunne (1977) discussed several strengths of small rural schools that could be used to attract and recruit teachers. Among these virtues are opportunities for:

- small instructional unit size
- individualized instruction
- fewer interpersonal and organizational problems
- knowing each child as an individual
- approaching problems, without the generalized policies
- greater student and parental participation in schools and school activities
- heterogeneity of social class

Seemingly, one important and possibly missing element in usual recruiting is the effort to highlight the strengths of rural schools and to "sell" the opportunities for a successful career that are embedded in these strengths.

Attracting the "right" person and the "best" person for a teaching position is certainly not a science and likely not an art. Intuition, luck and common sense are probably as often used as any objective measures on recommended recruiting procedures, but Seifert and Simone (1980-81) have identified several "ideal" characteristics for teachers in smaller schools.

- Certified and able to teach in more than one subject area or grade level
- Prepared to supervise several extra-curricular activities
- Able to teach a wide range of abilities in a single classroom
- Able to adjust to the uniqueness of the community in terms of social opportunities, life styles, shopping areas, and continously being scrutinized
- Able to overcome the students' cultural differences and add to his/her understanding of the larger society.

Other suggestions for the development of a recruitment plan are provided by Seifert and Simone. In part, they are listed below.

1. The easiest and most efficient plan for teacher recruitment involves a competitive salary and extra duty pay schedule.

2. The district can subsidize the cost of teacher retraining to fit the needs of the school district.

3. The district may offer to pay the costs of a teacher earning a master's degree, and in turn, the teacher makes a commitment to teach in the district for three years after receiving the degree.

4. The district may identify outstanding junior level education majors in the various colleges and universities, select those students that meet the districts' needs and offer financial assistance in the form of scholarships.

5. The district may identify and actively recruit outstanding teachers in larger districts and prospective teachers that were raised and educated in smaller schools by reminding these individuals of the many benefits they received while growing up in a small town atmosphere.

6. The district may emphasize teacher autonomy and direct access to administration.

7. The school district could provide less expensive housing for teachers.

8. The school district could encourage the business community to help by providing employment for teachers.

9. In order to attract effective teachers, it may be necessary to provide employment opportunities for the teacher's spouse.

The task of recognizing a teaching candidate who will become a top quality teacher is difficult. Usually, teaching candidates are hired or rejected on the basis of a review of credentials and sometimes after a short, often almost public interview. Candidates

have little if any first-hand knowledge of the school district. Teaching candidates relate being unimpressed by the interest expressed in them by recruiters, particularly in areas where there are plenty of applicants. An excellent student with a GPA of higher than 3.5 and a member of a college of education's honors program was asked by an administrator of a small school district, "With your background and ability, why would you want to teach in a place like my school?" Advisors, instructors, and/or student teaching supervisors are seldom asked about specific individuals and virtually never asked to recommend a beginning teacher for a job. True, there are general recommendations written by teacher educators in placement files, but critical objectivity for a specific position is nearly impossible to convey in this manner. In addition, laws permitting open access to placement files by applicants (candidates) have probably reduced the actual usefulness of written recommendations.

The practice or possibly even pressure to hire locally available persons to teaching positions limits the ability to select the highest quality person in the pool. Casual observations confirm this to be a rather common practice. Understandably, this would provide meaningful employment for a heretofore unemployed or underemployed person in the community, and it may be more painless and take less effort. Certainly, this writer would not suggest that local persons not be considered, but the goal should be hiring the best person for the position now and for the future.

The fact that small schools do not compete well with larger districts in recruiting efforts for teaching candidates should not come as a surprise. Generally, nonhuman reasons for this lack of

competitiveness are found in the literature, but the most critical factor may be the lack of expertise and available time for such efforts in smaller districts. Usually, the recruiter is the superintendent or a principal. In effect they must compete for the best teaching candidates with full-time staff in the personnel offices of large districts who probably have considerable training and experience. In addition, larger districts or at least the cities in which they are located are better known. Large city school district recruiters are often backed by attractive and informative supporting materials, including professionally developed brochures, video tapes and slide/ tape programs. On occasion, large districts request colleges/ universities to arrange time in classes or special meetings with seniors and underclassmen in teacher education programs. While they may not always attract or employ the best, they are effective in getting their attention.

As a final note about recruitment, there are noticeable exceptions to the generalizations expressed about ineffective recruiters from small districts. In a personal communications with Otto Bufe (personal communication, June 25-26, 1985), superintendent of the school in Grand Marais, Michigan, he described what I perceived to be a very effective practice. First, one must understand that Grant Marais is located on the south shore of Lake Superior in the Upper Peninsula of Michigan. It is geographically isolated, and although beautiful during the short summer, winters are harsh with an annual snowfall of over 200 inches and subzero temperatures. The area is battered by extremely cold winds that seem to never cease. In addition, unemployment exceeds 50 percent in a town of 350, and the

K-12 school has a total enrollment of 85 students. The school operates one bus, and the threat of consolidation lingers. Consolidation with the nearest district would require students to ride up to four hours per day in a bus. Teacher salaries are low, about $13,000 for a beginning teacher, and all teachers have multiple grade levels, and/or several (5-6) areas of preparation. At first consideration, one would question why any one would want to teach there. However, Mr. Bufe describes his teachers as absolutely top quality. Each teaching candidate visits with the teachers and students in the school, parents in their homes and other townspeople in their workplaces. They are given a very thorough orientation to the town and surrounding area. Strengths of the school and opportunities to make significant decisions and provide leadership in the school are emphasized. In essence, the school and community are "sold" to the candidate, in a positive, realistic sense. By the end of the intensive interview/ orientation, one would expect mutual interest or mutual disinterest between the candidate and the school's representative, but clearly a teacher in this school would be well aware of this situation. Undoubtedly, there are equally effective techniques used across the country, but unfortunately they are not widespread enough.

In a word, small/rural schools must become aggressive. This aggressiveness must begin by seeking out the best qualified and best suited for employment in their districts. The search should extend to other schools, across state boundaries, and certainly beyond the local communities. After identifying potential candidates, there should be a thorough orientation, including an accurate explanation of the opportunities and advantages for teaching in a given community. If a

local school cannot redirect the needed resources or time to such an effort, is it reasonable to consider contracting with an external "head-hunter," a practice very common in the business world? Is it economical or even reasonably feasible for a superintendent to spend several days away from school to visit college campuses in search of one or two teachers? Certainly, any on-site interviews/orientations should be done by local personnel.

Preparation of Quality Teachers

Perceptions of what constitutes a highly qualified teacher are quite varied, and there may be no area for which there is more disagreement than in the preparation of teachers for rural/small schools. This is particularly true for secondary teachers, since college departments beyond the school/college/department of education are more directly involved in their preparation. Rural school administrators request/desire generalists, and college faculty in the teaching content areas (English, mathematics, etc.) insist on preparing specialists. Teacher educators want to place student teachers in suburban schools, and rural schools often never see a student teacher.

The ideal teacher for the small school has been identified by Reavis and Mehaffie (1980, October) in terms of what they should be able to do. Some of the qualities are:

- Be able to teach more than one subject and more than one grade level.
- Be able to teach students of a wide range of abilities in the same classroom during the same time span.
- Be knowledgeable about materials and resources and requisition procedures for these.
- Be able to direct a variety of extra curricular or co-curricular activities.
- Be able to supervise and assist students who take correspondence courses.

They go on to cite some areas where teachers in small schools must exceed the norms of teachers in larger schools. Included in this list are:

- Teach different subjects in alternate years.
- Combine pupils of more than one subject or grade in a single class.

- Reprepesent the "larger world" and act as a bridge to it.

There seems to be a desire to "fit" the teacher to the structure and character of the small school. Experienced teachers in a remote, rural school system in the mid-Atlantic region of the United States perceived their needs to be in the general areas of: (1) contact with others outside the classroom, (2) supply and use of instructional materials, (3) relating to students on an affective level, (4) relating to parents, (5) teaching exceptional children, (6) classroom management and discipline, and (7) self-improvement, including time and stress management. (Reed & Seyforth, 1984).

Frank Cyr (cited in Nachtigal, 1982) proposed that one could take advantage of the inherent strengths of smallness and offer quality education that urban schools could emulate. His design of such a plan rested on several related characteristics.

- The small school serves small groups.
- Human relations are basic.
- Organization and operation are articulated.
- Operation must be flexible.
- Personnel must be versatile.
- Facilities must serve multiple purposes.
- Pupils participate in policy planning.
- The school is an integral part of the community.

When mentally translating these characteristics into the attributes of teachers who would work in these schools, it is obvious that there are considerable implications for teacher preparation (education) programs.

Contrast the emphases reflected in these observations and ideas with those in A Nation at Risk (National Commission on Excellence in Education, 1983).

"high school graduation requirements (should) be strengthened and that, at a minimum, all students seeking a diploma be required to lay the foundations in the Five New Basics.." (p. 24).

International comparisons of student achievement, completed a decade ago, reveal that on 19 academic tests, Americans were never first or second and, in comparison with other industrialized nations, were last seven times (p. 8).

Business and military leaders complain that they are required to spend millions of dollars on costly remedial education and training programs in such basic skills as reading, writing, spelling, and computation (p. 9).

Persons preparing to teach should be required to meet educational standards, to demonstrate an aptitude for teaching, and to demonstrate competence in an academic discipline (p. 30).

Substantial nonschool personnel resources should be employed to help solve the immediate problem of the shortage of mathematics and science teachers (p. 31).

More recently and reported by Jacobsen (1985, June 12), the Holmes Group Consortium, which is composed of deans of education from a group of 28 research universities, is proposing the creation of teacher education programs at member institutions to develop an "elite corps of schoolteachers." Essentially, persons prepared in these programs would complete:

- an undergraduate major in a standard academic subject taught in schools
- a master's degree in teaching or education
- a second postgraduate degree in a specialized area of professional education
- area of professional education

(The full report of the Holmes Group Consortium is expected to be completed by mid August, 1985.)

The National Commission for Excellence in Teacher Education (1985) made several recommendations in its report entitled A Call for Change in Teacher Education. Among these, three applied directly to

programs for teacher education. They are:

- Each teacher education program should be an exacting, intellectually challenging integration of liberal studies, subject specialization from which school curricula are drawn, and content and skills of professional education.

- Following their completion of a teacher education program and the awarding of a provisional certificate, new teachers should complete an induction period or internship of at least a years duration for which compensation is provided.

- States should encourage and assist the development and evaluation of experimental teacher education programs.

This commission, chaired by Peter Magrath, President, University of Missouri, Columbia, included persons holding such positions as governor, president of teacher organizations (NEA and AFT), chancellor/president of a college, past president of school boards' association (NASB), state superintendent, local superintendent (Pittsburg, Pennsylvania), and state legislator. (Note the absence of anyone who even remotely represents rural or small schools.) Thirty-one papers were commissioned in preparation for this report, none of which focused on the needs of rural and small schools.

From the above selected discussions, it seems apparent that considerable energy is being directed toward teacher education programs. However, the unique roles and responsibilities of teachers in rural and small scools are not being considered. In effect, this will likely magnify the impact - - programs for rural teachers will not be developed because they will not match accreditation standards and, due to the move to greater specialization and extended programs, fewer teachers will be able to obtain multiple teaching endorsements and/or take college work that will better prepare them to work and live in a rural community.

Chracteristically, identifiable (quantifiable) factors are used in determining the quality of local schools. Examples of these are:

- number of course offerings
- number of books in the library
- drop-out rates
- graduation rates
- SAT/ACT scores
- number of students who "passed" a state competency examination
- length of school day/number of days of school per year

The same type of mentality is used in assessing the quality of teacher education candidates and teacher education programs. Examples of these are:

- number of hours required in a teaching specialty
- number of weeks of student teaching
- average grade point (often in dissimilar sets of courses)
- ACT, NTE and scores on other "national" examinations
- size of library collection
- teaching load of faculty

Obviously, some of these factors can be reasonably associated with whether students have succeeded in one phase of the program or not, but others are, at best, remotely related to the purposes of education, and certainly several do not reflect what an individual would experience. For example, opportunities for leadership, participation in extracurricular activities (school plays, musical groups, athletics, etc.) and involvement in community work study/recreation programs are not generally included.

Teacher education programs are almost continually under fire, and in recent years the intensity of criticism has been even greater. In fact, the title of a recent publication by the Western Interstate Commission for Higher Education (WICHE) is Quality in Teacher

Eduction: A Crisis Revisited. In this report (Gosman, 1985), the following summary is made:

> Teacher education institutions are attempting to modernize their programs to stress greater quality, although the variety of changes indicates a lack of consensus on the most effective way to educate teachers. Initiatives being undertaken by schools of education include:
>
> - Strengthen admission, retention and graduation standards
> - Changing program structures and updating obsolete curricula
> - Increasing use of new educational technologies in teacher training
> - Extended training beyond the traditional four years of college and providing more preservice practical experience for student teachers
> - Improving inservice training for teachers in the field, as well as training other professionals to be teachers and
> - Engaging in more cooperative activities with the schools and state agencies (p. viii).

She goes on to conclude that "a central problem is the need to attract high-quality students into teaching and retain the best teachers in the profession" (page viii). This is a laudable statement, but it falls short when quality is defined solely in terms of SAT, ACT and GRE scores, which are the usual public indicators of quality. Clearly, test scores of students who are reported to be preparing for careers in teaching have declined at a rate greater than the national average. This is a concern to teacher educators and ought to be a concern of society. Other better paying occupations are available; and women, who have traditionally comprised a large part of the teaching force, have far greater career opportunities than they did in earlier years.

"Quality personnel is the key to quality education," is a statement made by Gardener and Edington (1982, p. 12). To accomplish this feat, one must attract quality persons to teaching as a career, provide quality teacher eduction programs that address the needs of rural and small schools, employ only the potentially best in the schools, retain the best, and eliminate those other than the best. Essentially, none of these are being used in any systematic or widespread manner. The provision of quality teacher education programs will be the primary focus of the remaining portion of this section.

Preservice teacher education programs are generally described as containing three major segments: general education, a teaching specialty, and professional education.

College teacher education programs are accredited by a state agency, usually a state department of education; and graduates of an accredited program are eligible for certification in that state for specific teaching areas, i.e., elementary, English, biology, etc. Usually, teaching candidates may obtain certification in an additional state, based on successful completion of an approved program in a prior state. In essence, there is not a universal reciprocity agreement, although there seems to be a resonable satisfactory working arrangement in force.

The specific requirements/standards for teacher education programs are established (approved) by a state board of education, which is very likely not the governing board of even the state institutions of higher education where the programs are conducted.

Typically, preservice teacher education programs require 120-130 hours, which are distributed as follows:

A. 50 hours - general education (English composition, humanities, fine arts, social science, math, science, etc.)

B. Secondary
30-50 hours - teaching specialty or teaching major, i.e., English or biology or history, etc.

Elementary
12-20 hours - area of concentration, i.e., math or science or social studies, etc.

C. Secondary
30 hours - professional education (educational psychology, methods, reading in content area, foundations of education, student teaching, etc.)

Elementary
40-50 hours - professional education (educational psychology, methods in four or more teaching areas of the elementary school, foundations of education, student teaching, etc.)

Depending on the specific teaching area for secondary and the area of concentration in the elementary education program, there is some overlap between the general education and teaching specialty areas, i.e. some courses can be used to meet requirements in both areas. Since all programs within a state are accredited on the same set of regulations, teacher education programs are remarkably similar. Some variation exists across states, but again, teacher education programs are certainly more alike than they are different. Even the few five-year programs in existence today are generally a four-year liberal arts program with an added year of professional education, a usual four-year education program with more student teaching and about

fifteen hours of graduate work, or an expanded four year program with a few more hours added to each major segment of a traditional four-year program.

Although teacher education programs are comparable in content, structure, and form, most states do allow for experimental programs that may deviate from the norm, and some flexibility is permitted in meeting specific requirements. Reasonably, one would expect to see teacher education programs designed to prepare teachers for rural and small schools. However, surveys by Muse (1977) and Horn (1981) revealed the presence of very few, even in states with substantial rural populations. In Muse's study, only 125 of 200 colleges indicated that they were involved in rural teacher programs, while only 20 percent of 40 institutions in 28 states, reported to Horn that they had practices/programs specifically designed to prepare educational personnel for rural/small schools at the preservice level. From an analysis of open-ended responses, Horn concluded that the most difficult barriers to overcome in meeting the needs of rural/small school personnel fall into one of four categories:

- resource concerns (money, time and personnel)
- commitment and responsibility concerns (individual and institutional)
- political and bureaucratic constraints
- knowledge and research concerns

Many institutions provide certain options for teacher education students to have exposure to rural/small schools. Largely, this is in the form of field experiences, including observations, aiding, and student teaching. However, the focus, intensity and value of these are questionable if there is the full intention of preparing persons

to teach in rural and small schools. On the other hand, a few rural education programs are or have recently been in existence. Notable examples are found at Western Montana College, Brigham Young University, Berea (Kentucky) College, Western Michigan University, and the University of North Dakota. Brief descriptions of these and others are found in Nachtigal (1982) and/or Gardner and Edington (1982). Other programs in developmental stages can be found at Kansas State University, Texas A & M Univerity, and East Carolina University. A bit of probing soon reveals the interest and commitment of possibly only one individual to develop and conduct a program for rural/small school teachers is present in these institutions. Reasons for this are probably many, but institutional support and commitment seem to be relatively weak. Obviously, this in itself is a serious problem.

The body of knowledge of what should constitute a teacher education program is growing, and it reflects greater consideration for research findings. An example is a publication by Egbert and Kluender (1984) entitled Using Research to Improve Teacher Education. It summarizes the research on such topics as teacher-student interactions, classroom management and time-on-task among others. More importantly, suggestions of why and how these can be incorporated in a teacher education program are provided. Also, David Smith (1983) edited a publication entitled Essential Knowledge for Beginning Educators. Included are topical discussions on "Classroom Organization and Management" by Brophy, "Context Effects in the Teaching-Learning Process" by Soar and Soar, "The Context of Teaching and Learning: School Effects and Teacher Effects by Edmonds, and "A

Resource-Allocation Theory for Classroom Management" by McDonald. All of these seem to have direct application to the preparation of quality teachers for rural schools. Horn, Davis and Hilt (in press) investigated the importance of 45 selected areas of preparation for teaching success in small schools of Kansas. As major clusters, the areas of oral communications, controlling discipline, organizing and managing the classroom, teaching major (specialty) and motivating students were rated highest. Little difference was observed between the perceptions of teachers in very small schools (1-300 students) and larger schools (301-600). The results of this study provide little justification for eliminating elements of current teacher education programs. Yet, critics continually lament the lack of attention colleges/universities pay to the needs of small schools. Obviously, we have a paradox. Based on professional judgment, some supporting research, and seemingly the wishes of field-based educators, it seems more than reasonable to develop programs that will focus on the preparation of quality teachers for rural and small schools.

Evertson, Hawley and Zlotnik (1984) reported on a review of research related to the characteristics of effective teacher preparation programs. First, they concluded that teacher education programs do have a positive influence on teachers. This is evident in comparing the achievement of certified teachers' students and supervisors' ratings of their competence with non-certified counterparts. The normal criteria for admission to teacher education programs and for entry into the profession (GPA, performance on the National Teacher Examination, faculty evalutions of student teachers, and attitudinal measures) have minimal predictable

results, except for verbal ability. However, Evertson, et.al. (1984, p. 4) said, "The research on this issue is limited, both in volume and quality, but is suggestive either of a need for caution or the need for more study before firm standards are set." Based on the review of considerable research, they identified the major core teaching skills which promote student learning. In an abbreviated form they are:

- maximize academic learning time
- managing and organizing the classroom in ways that allow for planning rules and procedures and teaching these to students, monitoring student work and behavior, keeping students accountable for academic work and planning lessons and providing for alternative ways of grouping students
- utilizing interactive teachir strategies
- communicating high expectations for student performance
- rewarding student performance

While no one seems to disagree that one needs to know what one teaches to be fully effective, the question is really how much they should know? Evertson, et.al. concluded:

> "..knowing one's subject matter does not necessarily make one a good teacher of that subject. But it also seems reasonable to conclude that teachers with good instructional capabilities would be more effective if they had good knowledge of the subjects they teach" (p. 30).

The induction stage of teaching has for the most part been totally ignored in "teacher education" programs. New (first year) teachers are immersed into a totally new role with virtually the same expectations of those with many years of experience. While this may be a chaotic and even frightening experience for the teacher, what about the effect on students? Teachers often focus on instructional strategies that stress control over student behavior; the larger

repertoire of strategies developed in teacher education programs are set aside, if not even lost forever. Survival may be the most important goal for many first year teachers, especially those who have no preparation for or experience in rural communities. To ease the shock of the first year, the student teaching experience should be as realistic as possible, including breadth of responsibilities, environmental conditions, accountability, commitment, and intensity. During this time, responsibility for assistance to the student teacher should be shared by the local cooperating teacher and administration and the university supervisor. Although possibly in a different form, assistance for the beginning (first year) teacher should be provided. This assistance should be made available by the local agency, such as a local district or intermediate service agency, and a college/university in a cooperatve and supportive manner.

Gradually, the individual teacher should assume greater and greater responsibility for his/her professional development with inservice being largely the responsibility of the local district. While we normally think of teacher education programs as undergraduate, preservice college work, efforts to extend this over the professional life of the individual should be initiated. The need for continuous learning by teachers is expressed very well by Adler (1982) in the Paideia Proposal: "The teacher who has stopped learning is a deadening influence rather than a help to students being initiated into the ways of learning" (p. 59).

A professional development program, emphasizing teaching in small schools serving rural areas, would be of considerable value. A blend of knowledge from research and from professional practice and

experience would be particularly appropriate. This approach would provide credibility and the opportunity to validate research findings in small schools. Contrary to current practices, there would be support and encouragement to remain in the small schools, as opposed to becoming more specialized and dissatisfied.

This section provides different directions that might be explored for preparing teachers at the preservice level. Institutions of higher education are difficult to change, and it may be even more difficult to challenge recognized patterns of teacher education; therefore, three options are suggested.

The Substitution/Addition Option

Essentially, this is the least threatening proposal, since all basic elements (general education, teaching specialty and professional education) of a traditional teacher education program are maintained.

General Education: Use electives for courses that related to the rural environment and substitute courses where possible, i.e., rural sociology for "introduction" to sociology, agricultural economics for "principles" of economics, etc.

Teaching Specialty: Choose more generalized or comprehensive major, i.e., social studies rather than history, physical science rather than physics, etc.; qualify for multiple teaching endorsements, with particular emphasis on unrelated areas, i.e., biology and English, a foreign language and social studies,etc.

Professional Education: Early and continuous field experiences in rural/small schools; additional field experiences during college vacation time, i.e., early January, spring break, and late May; methods courses focused on techniques for small groups, independent study, use of technology and curriculum development, using local resources; foundations courses, particularly educational sociology, including case studies of rural communities and/or independent study projects on rural community organizations and dynamics; extended resident student teaching experience in a rural community.

The Rural Education Alternative Option

As possibly one of several alternative programs, students would select an option that would be designed for a teaching career in a particular type of setting of school, i.e., rural, urban, parochial, bilingual, etc. Selection of an option should be accomplished by no later than the sophomore year of college. The curriculum would include:

General education: (Same as previous option.)

Teaching specialty: (Same as previous option.)

Professional Education: A separate and unique set of course work and field experiences designed to prepare a person for teaching and living in a rural setting. Rather than optional assignments for those interested in rural schools, the curriculum would concentrate on utilizing the strengths or potential advantages of attending/teaching in small/rural schools. Course work would be heavily oriented toward case studies, on-site practicums, and extensive immersion into the rural school and community. Student teaching would be at least a full-semester, resident experience and would provide for a variety of non-school involvement in the community.

Rural school administrators become upset or at least annoyed at colleges when additional certification endorsements are not recommended for currently employed teachers in their districts and when teachers, particularly new ones, feel unqualified or unhappy about teaching specific courses for which they are certified. For example, a teacher certified to teach social studies does not feel qualified to teach government, or a teacher with 45 hours of mathematics does not want to teach 9th grade mathematics or an English teacher with concentration in British literature does not want to teach 8th grade grammar. In a sense, colleges in general are at fault either in failing to provide proper advising or by not providing a

realistic exposure to the expectations of teaching in a rural school. On the other hand, as long as local schools organize their curricula and name high school subjects according to traditional departmental structures in colleges, professors, especially those in the "content" areas, i.e., English, mathematics, biology, political science/government, etc., will demand that the only qualified teacher is one with at least a major in the department and some would even say a graduate degree (without any education courses). In the main, these programs are designed to prepare students for advanced graduate degrees and careers in research or as college professors, not teaching in K-12 schools. In fact, one of the proposals of the Holmes Group Consortium is that all education degrees be eliminated. All students, including those preparing to teach in elementary schools, would be required to "pursue more serious (than educaton) general/liberal study and a standard academic subject nomally taught in schools" ("Summary of Deans' Report", 1985, p. 16). Professional education would be addressed in a master's degree prgram in education and prior to certification and entry into the field. Generally, states do not request public schools to teach the specific courses identified in the curriculum. Instead of specifying biology, chemistry and physics, a more usual stated requirement is two years of science in grades 9-12 of which one must be a laboratory course. Is it time to reconceptualize what the high school curriculum should be and cease trying to look like a mini-college? Aren't we really more interested in high school students understanding the natural world and the nature and methods of science, as opposed to being able to recite concepts,

principles, and laws and/or emulate "experiments read from a physics textbook? If the answer to the previous question is yes, then we need to concern ourselves with teachers certified as generalists, such as science, rather than as specialists.

The third rural teacher education option is based on a reconceptualized high school curriculum and a corresponding revision of the patterns of teacher preparation.

The Reconceptualization (Experimental) Education Option

Obviously, major revisions, which would be required to develop this option, would be very difficult to implement. The politics of college campuses, the potential threat of losing majors in academic departments, and the shifting of credit hours would in themselves be enough to discourage the weak of heart. However, a groundswell from the field to reconceptualize and redesign curricula in rural schools would certainly provide encouragement. In truth, this proposed option is somewhat tongue-in-cheek, but the writer would be very pleased to see at least a pilot program or an experimental program involving a cooperative effort among a cluster of rural schools and a university.

An example of how one might at least initially organize a high school curriculum would be along major themes such as these:

A. Ways of Understanding
   - critical reading
   - scientific investigation and discovery
   - experiential learning
   - analyses of social systems and ethnography

B. Human Heritage and Accomplishments
   - scientific
   - social
   - political
   - religious
   - artistic
   - literary
   - musical
   - linguistic

C. Ways of Expression and Communication
- verbal
- written
- mathematically
- graphically
- artistically
- musically
- listening

D. Self-sufficiency
- health/nutritionally
- recreationally
- educationally
- financially
- socially

To carry these themes through at least grades 9-12, a teacher would need to be prepared far differently than now. Essentially, they would need to be broadly educated, with experience in the methodology of several disciplines. Professional education would be heavily field-based spread over a four year period, relying on case studies, testing and evaluating various instructional strategies and curriculum materials.

In addition, fully one-half of the program would be concentrated in rural communities in a cooperative work/study program. During this time, they would gain the experience of living in a rural community in addition to studying the social milieu surrounding the school and its students. In the high school curriculum, the traditional subject areas would be addressed and essential/basic skills would be developed, but in an entirely different context. For example, two teachers might work with a group of 30 students for a concentrated period of time in which they might focus on the goal of developing students' knowledge about "ways of understanding." By small group discussion, independent reading and individually conducted projects, a student would become involved in the traditional areas of reading, math, biology, social studies, and English. Obviously, teachers would need to be highly competent in individualizing instruction, directing

students to various reference materials, use of electronic information retrieval systems, developing, guiding and evaluating student projects, interacting with students and members of the community and maybe most importantly, assuming a leadership role in the community.

Concluding Remarks

A key element in preparing quality teachers for rural schools or any other type of school depends to a great extent on institutional commitment. Beyond that, planners and teacher educators must recognize the strengths, weaknesses and potential advantages of learning and teaching in a rural school. The needs of rural schools should be addressed; but, at the same time, full recognition must be given to the inherent limitations of working in rural schools or any other unique setting.

The opening sentence of this paper stated that it was not the purpose to romanticize rural schools. In earlier sections, positive attributes of small/rural schools have been identified, but there are also weaknesses. If we are serious about providing quality education for all Americans, including rural areas, then we must fully commit ourselves to developing K-12 and teacher education programs that will achieve this objective. This will cost money, more than we currently spend and maybe more than Americans are willing to spend, but this must be determined. Otherwise, we can only talk about attracting the brightest to teaching and providing equal educational opportunites for all Americans. Equal does not mean identical, and rural educators deserve the right to try approaches different from patterns developed for larger schools in urban and suburban areas. However, all schools,

including rural schools, must be held accountable for demonstrating their ability to educate children and youth in an effective manner. Better and more extensive indicators of quality need to be determined, and means to achieve quality must be reflected in all endeavors, whether it is teaching first graders to read, organizing extracurricular activities, or designing a teacher education program.

Throughout this paper, there are several suggestions and proposals for action. However, I would like to identify a few recommendations that would be of particular interest to program and policy decision-makers:

1. The Rural Education and Rural Family Education Policy of the 80's must be taken seriously, and the U.S. Department of Education should demonstrate where action has resulted or will result from this policy.

2. The Interagency Committee on Rural Education of the U.S. Department of Education should approve a research agenda which is reflective of the thinking of educational researchers and practicing professionals in the schools. Furthermore, funds should be made available on a competitive basis to support research that addresses the problems as well as the unique opportunities for quality education in rural America.

3. Colleges and universities which have made a commitment to providing preservice and continuing education for the preparation of educational personnel for rural and small schools should initiate identifiable programs for that purpose. These programs should reflect existing knowledge about how students learn, effective teaching techniques, and the characteristics of small schools and rural communities.

4. State departments of education should acknowledge the folly of recognizing only one type of school structure and teacher education program. This should be translated into alternative accreditation and certification standards/procedures. Alternatives should be of equal quality, but may be different.

5. Permissive legislation and policies should be initiated to provide for the support of first-year and continuous professional development activities for all teachers, while recognizing the unique needs and necessary delivery systems

for rural areas in their financial support of such activities.

6. Local schools should be considerably more aggressive in recruitment of teachers for rural/small schools, and they must retain the best and reject ineffective experienced teachers.

7. Colleges/universities with rural education programs should become engaged in dialogue about proven or promising practices for preparing teachers. Exchanges or cooperative arrangements should be developed to provide unique or desirable field experiences.

8. Federal and state governments should initiate extensive studies in rural education. Among the priorities for study would be indicators of quality effective schools/teachers, identification of exemplary curricular arrangements and staffing patterns, and effective instructional systems, including use of technology, and lifelong learning for teachers and other members of the community.

References

Adler, M. (1982). The Paideia Proposal: An Educational Manifesto. New York: MacMillan.

Allred, W. E. & Smith, R. B. (1984). Profile of Utah Teachers Leaving the Profession. The Rural Educator, 5 (3), 2-5.

Akin, James N. (1985). Teacher Supply/Demand/1985. Madison, Wisconsin: Association for School, College and University Staffing.

Barker, B. O. & Stephens, E. R. (1985, May). National Rural Education Research Agenda. (A report presented to the Interagency Committee on Rural Education, U.S. Department of Education at the request of the Executive Board of the Rural Education Association.)

Beckner, W. (1983). The Case for the Smaller School. Bloomington, Indiana: Phi Delta Kappa Foundation.

Bell, T. H. (1983). Rural Education and Rural Family Education Policy for the 80's. Washington, DC: United States Department of Education.

Carlberg, C. (1981). Survey of Why Kansas Teachers are Leaving the Profession. (Report to the Professional Teaching Standards Board of the Kansas State Department of Education). Topeka, Kansas: Kansas State Department of Education.

Davenport, L. R. (1983). Message from the Assistant Secretary for Elementary and Secondary Education. In P. Davis and J. Horn (Eds.). Proceedings of the Joint Meeting of the 75th Annual Rural Education Association and the Fifth Annual (KSU) Rural and Small Schools Conference (pp. 4-9). Manhattan, Kansas: Center for Rural Education and Small Schools, KSU.

DeFoe, B. H. (1981). Community Problem Solving and Small/Rural Schools. Austin, Texas: Texas Education Agency. (ERIC Document Reproduction Service No. ED 202 629).

Dunne, F. (1977). Choosing Smallness: An Examination of the Small School Experiences in Rural America. In J. P. Sher (Ed.), Education in Rural America - A Reassessment of Conventional Wisdom (pp. 81-124). Boulder, Colorado: Westview Press.

Egbert, R. L. & Kluender, M. M. (Eds.). (1984). Using Research to Improve Teacher Education. Washington, DC: American Association of Colleges for Teacher Education.

Evertson, C., Hawley, W. & Zlotnik, M. (1984). The Characteristics of Effective Teacher Preparation Programs: A Review of Research. Nashville, Tennessee: Vanderbilt University, Peabody College.

Gosman, E. (1985). Quality in Teacher Education: A Crisis Revisited. Boulder, Colorado: Western Interstate Commission for Higher Education.

Helge, D. (1984). Problems and Strategies Regarding Regionalizing Service Delivery: Educational Collaboratives in Rural America. Murray, Kentucky: Murray State University. (ERIC Document Reproduction Service No. ED 242 449).

Horn, J. G. (1981, April). Higher Education's Response to the Needs of Rural Schools. Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, California. (ERIC Document Reproduction Service No. Ed 201 435).

Horn, J. G. (1983). Administrative Support and Financial Remuneration as Factors in Teachers' Decision to Leave the Profession. (Report to the Professional Teaching Standards Advisory Board of the Kansas State Department of Education). Manhattan, Kansas: Center for Extended Services and Studies, College of Education, Kansas State University.

Horn, J. G., Davis, P. & Hilt, R. (in press). Importance of Areas of Preparation for Teaching in Rural/Small Schools. Research in Rural Education.

Jacobson, R. L. (1985, June 12) University Deans Seek Elite Corps of School Teachers. The Chronicle of Higher Education. pp. 1, 16-17.

LaShier, W. S., Hefley, R. & Rzoa, W. Y. (1982) Why are Teachers Leaving the Profession? (Report to the Professional Teaching Standards Board of the Kansas State Department of Education) Topeka, Kansas: Kansas State Department of Education.

Miller, J., Jr. & Sidebottom, D. (1985). Teachers - Finding and Keeping the Best in Small and Rural School Districts. Arlington, Virginia: The American Association of School Administrators.

Moriarty, T. E. (1981). Problems of Rural Superintendents in Western South Dakota. The Rural Educator, 3 (1): 1-5.

Muse, I. D. (1977). Preservice Programs for Educational Personnel Going Into Rural Schools. Las Cruces, New Mexico: New Mexico State University, Clearinghouse for Rural Education and Small Schools. (ERIC Document Reproduction Service No. Ed 135 506).

Nachtigal, P. M. (Ed.). (1982). Rural Education: In Search of a Better Way. Boulder, Colorado: Westview Press.

National Center for Education Statistics. (1984). The Condition of Education, 1984 Edition. Washington, DC: NCES.

National Commission for Excellence in Teacher Education. (1985). A Call for Change in Teacher Education. Washington, DC: The American Association of Colleges for Teacher Education.

National Commission on Excellence in Education. (1983). A Nation at Risk: The Imperative for Educational Reform. Washington, DC: U.S. Government Printing Office.

Reavis, C. and Mehaffie, S. (1980, October). Staff Recruitment and Inservice Development in Smaller Schools. NASSP Bulletin, pp. 32-35.

Reed, D. F. & Seyfarth, J. T. (1984). Assessing Needs in Rural Schools. The Rural Educator, 6 (1), 12-17.

Seifert, E. H. & Simone, P. (1980-81). Personnel Practices for Recruiting and Keeping Effective Teachers in Smaller Schools. The Small School Forum, 2 (2), 12-13.

Sher, J. P. (Ed.). (1977). Education in Rural America: A Reassessment of Conventional Wisdom. Boulder, Colorado: Westview Press.

Smith, D. C. (Ed.). (1983). Essential Knowledge for Beginning Educators. Washington, DC: American Association of Colleges for Teacher Education.

Summary of Deans' Report: Goals for Educating Teachers as Professionals. (1985, June 12). The Chronicle of Higher Education, p. 16.

Surwill, B. J. (1980). Recommendations to Teacher Educators for Preparing Future Teachers for Careers in Rural Schools. Billings, Montana: Eastern Montana College. (ERIC Document Reproduction Service No. Ed 207 779).

Traugh, C. (1984). Rural High Schools: Heart of Education in North Dakota Special Report. Grand Forks, North Dakota: University of North Dakota. (ERIC Document Reproduction Service No. ED 251 273).

Warner, R. W., Jr. & Kale, K. E. (1981). Rural Education: A Field of Study Where Time Has Come in Higher Education. Greenville, North Carolina: East Carolina University. (ERIC Document Reproduction Service No. ED 207 757).

Worthington, R. M. (1983). A Rural Education Policy for the 80's. In P. Davis and J. Horn (Eds.). Proceedings of the Joint Meeting of the 75th Annual Rural Education Association and the Fifth Annual (KSU) Rural Small Schools Conference (pp. 60-71). Manhattan, Kansas: Center for Rural Education and Small Schools, KSU.

Zetler, A. G. & Lohren, S. L. (1982). Teacher Education for Rural Schools: The Western Montana College Model. Dillon, Montana: Western Montana College. (ERIC Document Reproduction Service No. ED 237 252).

Jerry Horn, Associate Dean of the College of Education at Kansas State University, received B.S. (natural science) and M.S. (secondary education) degrees from Oklahoma State University and the Ed.D. degree (science education) from the University of Colorado. His professional experience includes seven years in the Denver Public Schools, seven years at the University of South Dakota and eight years at Kansas State University. Although trained as a science educator, he works extensively in the fields of teacher education and rural education. This work includes teaching, research and service, with publications in numerous professional journals. Professional leadership has included the positions of president of the Association for the Education of Teachers in Science, president-elect of the Rural Education Association and member of the Board of Directors of the National Science Teachers Association.