



# Preparing teachers to teach in rural schools



Institute of Education Sciences

U.S. Department of Education



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July 2008

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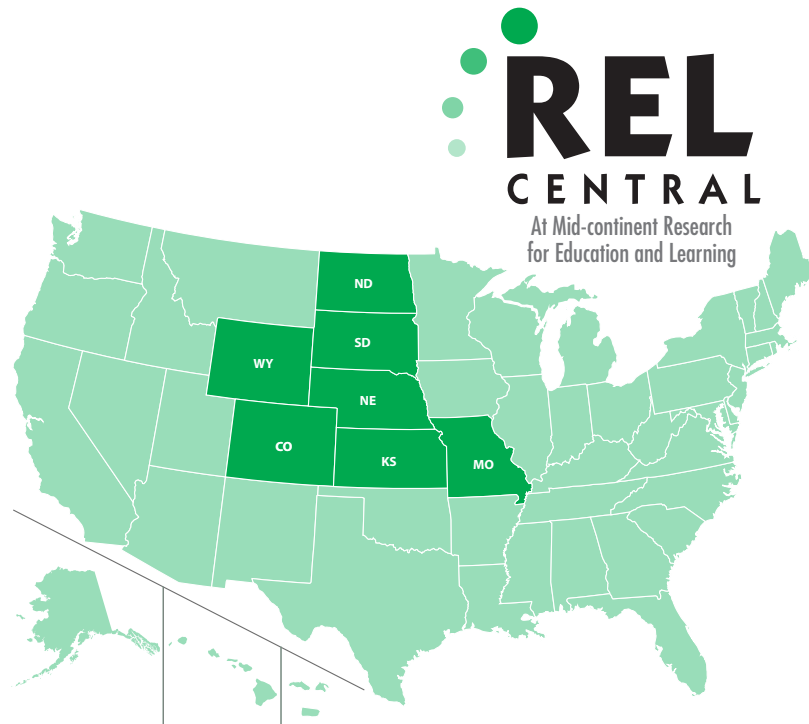
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July 2008

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-06-CO-0023 by Regional Educational Laboratory Central administered by Mid-continent Research for Education and Learning. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

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Barley, Z. A., and Brigham, N. (2008). *Preparing teachers to teach in rural schools* (Issues & Answers Report, REL 2008–No. 045). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

This report is available on the regional educational laboratory web site at <http://ies.ed.gov/ncee/edlabs>.

# Preparing teachers to teach in rural schools

**The Central Region states have greater percentages of rural students and schools than the U.S. average. This report describes how nine teacher preparation programs in the region prepare their graduates for teaching positions in rural settings.**

Rural schools face difficulties recruiting and retaining a qualified teacher workforce. Potential contributing factors include social and collegial isolation, low salaries, multiple grade or subject teaching assignments, and lack of familiarity with rural schools and communities. Together, these challenges can discourage teachers from accepting rural positions or cause them to leave rural settings after teaching there for only a short time.

While the shortage of qualified teachers in rural areas is not a new phenomenon, the passage of the No Child Left Behind Act of 2001 brought an added sense of urgency. Teachers not qualified in each content area they teach are now required to seek the necessary credentials if they are to continue teaching in those content areas. And in many rural areas it is difficult to find the coursework to meet the No Child Left Behind Act’s “highly qualified teacher” requirement.

The Central Region has greater percentages of rural students and schools than the U.S.

average, so it is critical to determine how teacher preparation programs in the region are preparing their graduates for positions in rural settings—and whether these programs offer other ways to alleviate the teacher shortages in rural areas, such as convenient access to their programs for prospective teachers living (and possibly working) in rural communities.

This project addresses the following research question:

- What do rural teacher preparation programs in the Central Region do to prepare teachers for teaching in rural settings?

Based on a review of related articles, the Central Regional Educational Laboratory identified five promising program components to prepare teachers for teaching in rural settings: providing options for prospective teachers to become certified in multiple certification areas, promoting access to teacher preparation and professional development through distance learning opportunities and courses in rural communities, focusing on recruiting to teaching individuals who already reside in rural areas, offering practice-teaching opportunities in rural communities, and offering courses for prospective teachers focused on issues related to teaching in rural communities.

The researchers then identified nine educational institutions that used at least three of the five approaches thought to foster recruitment and retention of teachers in rural areas. The researchers conducted in-depth interviews with teacher educators at each of these institutions to provide detailed descriptions of how the nine institutions implemented the five approaches. From open-ended probing during these interviews three main strategies emerged: using technology for professional development, forging partnerships between universities that credential teachers and rural community colleges, and individualizing programs to meet a prospective teacher's specific needs for certification.

The following are the main findings of the study:

- Of 120 institutions in the Central Region that offer teacher preparation, only 17 confirmed a rural program emphasis, and only 9 have three or more of the components.
- Three of the nine programs offer options for teachers to receive multiple certifications.
- Seven of the nine programs offer online courses and four offer courses at more accessible community college campuses. Four of the nine programs recruit students from rural communities.
- Two of the nine programs actively seek student teaching placements in rural schools (however, seven of the nine are based in rural areas and naturally have access to rural school placements).

Rural schools in the Central Region face critical teacher shortages in three content areas: math and science, English as a second language, and special education. In math and science two of the nine universities offered programs that encouraged prospective rural teachers to pursue degrees with this focus. For English as a second language three universities offered programs with a rural focus. Finally, in special education three universities and a tribal college offer programs designed to prepare teachers for rural positions.

**July 2008**

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**The Central Region states have greater percentages of rural students and schools than the U.S. average. This report describes how nine teacher preparation programs in the region prepare their graduates for teaching positions in rural settings.**

## WHY THIS STUDY?

The No Child Left Behind (NCLB) Act of 2001 intends for every public school child in the United States to achieve proficiency in math and reading by the end of the 2013/14 school year. Included among its provisions is the requirement that all teachers be “highly qualified” to teach in each subject area taught. Highly qualified under the No Child Left Behind Act means that a teacher has a bachelor’s degree, has full state certification or licensure, and can demonstrate

a thorough understanding of every content area taught (through an undergraduate or graduate major or equivalent or by passing a state test on the subject or some other state-approved method).

Rural school districts may face special challenges in ensuring a highly qualified rural faculty. In rural schools teachers are more likely to teach multiple subjects, making it less likely that they are highly qualified in some of the subjects they teach. Rural schools tend to have fewer teaching positions than urban or suburban schools, so reassigning classes from noncertified to certified teachers, as many schools have done, may not be possible. Finally, rural schools have difficulty recruiting and retaining new teachers, not just as a result of the highly qualified teacher requirements, but also because of teaching conditions unique to rural schools (Monk 2007). The teachers recruited by rural schools must be prepared for the conditions of rural teaching. They not only must have the credentials they need, but they should also be aware of the nature of small schools in small communities.

In a meeting at the Central Regional Educational Laboratory the Commissioners of Education for the seven states in the Central Region discussed the difficulties that rural school districts face in ensuring a highly qualified rural faculty. They requested information on how teacher preparation institutions prepare their graduates for placement in rural districts. At a broader level, in a survey commissioned by Central Regional Educational Laboratory and conducted by The Gallup Organization in 2007 (The Gallup Organization 2007), educators in the laboratory’s seven-state region rated the importance of “meeting the highly qualified teacher requirement under NCLB.” Every state in the Central Region considered teacher quality to be an important issue. A majority of educators from each state rated this issue as “very critical” or “critical”: Colorado (64 percent), Kansas (72 percent), Missouri (84 percent), Nebraska (84 percent), North Dakota (63 percent), South Dakota (54 percent), and Wyoming (68 percent). In these

states the proportions of public schools in rural areas range from 29 percent to 78 percent (Johnson and Strange 2005), compared with 30.3 percent in the United States as a whole.<sup>1</sup> And the proportions of public school students attending rural schools range from 14.5 percent to 45.2 percent, compared with 19.1 percent in the United States (Johnson and Strange 2005). As these statistics indicate, preparing teachers to teach in rural schools is a high priority for the Central Region—and for the country.

This report describes how nine teacher preparation institutions in the Central Region prepare their graduates to teach in rural schools.<sup>2</sup> The report is not intended to provide evidence of the success of programs that prepare students for rural teaching. Even so, the descriptions of these programs will be of interest to educators and policymakers considering adding or increasing a rural emphasis in their own teacher preparation programs.

Researchers reviewed data from 28 four-year teacher preparation institutions in the Central Region whose materials indicated a possible focus on preparing teachers for rural settings.<sup>3</sup> Researchers confirmed the presence of five rural-focused program components—options for obtaining multiple certifications, access to teacher preparation for those living in rural areas, efforts to recruit to teaching residents from rural settings, the use of rural schools for practice-teaching placements, and the availability of online courses for rural teachers—in 17 of the 28 programs. Nine Central Region teacher

preparation programs, described in this report, had three or more of these components.

The primary audiences for this report are the Central Region commissioners of education,

other state policymakers, and administrators of teacher preparation programs who are considering adding or sharpening a focus on preparing rural teachers.

**Rural school districts may face special challenges in ensuring a highly qualified faculty**

## ENSURING A HIGHLY QUALIFIED RURAL FACULTY

Rural school districts may face special challenges in ensuring a highly qualified faculty. In rural schools teachers are more likely to teach multiple subjects, making it less likely that they are highly qualified in some of the subjects they teach. Rural schools also tend to have fewer teaching positions than urban or suburban schools, so re-assigning classes from noncertified to certified teachers may not be possible. Finally, rural schools have difficulty recruiting and retaining new teachers, not just as a result of the highly qualified teacher requirements, but because of teaching conditions unique to rural schools (Monk 2007). The teachers that rural schools recruit must be prepared for the conditions of rural teaching. They not only must have the credentials they need, but they should also be aware of the nature of small schools in small communities.

### Teaching in rural schools

Rural conditions can vary greatly across settings.<sup>4</sup> And varying economic conditions can make a major difference from one rural community to the next. While there are many positive aspects of rural teaching, such as small class sizes and a closer relationship with parents, this report focuses on the difficulties in order to better understand what teacher preparation institutions might do to prepare their graduates for rural teaching.

The nature of teaching can be different in rural areas than in suburban or urban areas. Because of the small size of rural districts and schools, teachers often need to teach multiple subjects and possibly multiple grades, sometimes in multigrade, mixed-age classrooms. Barrow and Burchett (2000)<sup>5</sup> reported that 49 percent of rural science teachers in their study had more than four preparations. In some rural areas teachers also need to be prepared to teach students with a wide variety of skill levels in the same classroom (such as mainstreaming special education students and English language learner students).



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## Recruiting teachers for rural schools

Overall, rural districts experience somewhat more difficulty recruiting teachers to fill vacancies, but they have a lower turnover rate, except for small rural schools. Finding qualified teachers to fill vacancies remains a problem, however, as these positions may require teachers to teach multiple subjects, especially in small schools. For secondary schools a single vacancy may mean that several courses cannot be offered until the vacancy is filled because, for example, a science teacher who retired or resigned might have taught several courses, such as beginning and advanced chemistry and physics. Hiring new graduates with multiple certifications and an interest in teaching in rural settings may be one solution for small rural schools.

Rural policymakers and researchers often decry the lack of research available to identify why it is so difficult to recruit and retain teachers in rural districts. Liu and Johnson (2006) surveyed a representative sample of first- and second-year teachers in four states, with a response rate of 65 percent. They note that teachers can accept positions without having received adequate information about the job requirements and conditions. They found that many teachers were told or learned very little about the actual job for which they were being recruited. In three states fewer than half the responding teachers could agree on a job description from the hiring process. They suggest that “[m]any new teachers thus may be surprised by what they find in their schools and have professional expectations and needs that go unmet. Given that this likely contributes to new teachers’ dissatisfaction, ineffectiveness, and turnover, it is cause for serious concern” (p. 352). This suggests that prospective teachers need to be well informed of the conditions of teaching in rural schools. This report poses this as not only a responsibility of the hiring school but also part of the preparation of teachers to teach in rural schools.

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## PREPARING TO TEACH IN RURAL SCHOOLS

There has been limited research on preparing teachers to work and stay in rural communities (Wilson, Floden, and Ferrini-Mundy 2001). Barker and Beckner (1985) conducted a survey of all four-year public colleges and universities with teacher training programs. They obtained responses from 64.7 percent of programs surveyed (306 of 473). They found that fewer than 2 percent of the program faculty focused research on rural education, only 28 percent (87) of the institutions included rural education in their curricula, and only 3 percent (9) reported a course on rural or small schools.

Rural educators have long been calling for special preparation for new teachers to teach in rural schools. Guenther and Weible (1983) trace back to 1917 this concern for preparing teachers for rural classrooms (Woofter 1917). In an unpublished dissertation Oeschlager (1979) surveyed a random sample of small high school principals. Two-thirds of them indicated that teachers should have some experiences to prepare them for the dynamics of life in rural communities: developing and adapting curriculum to the needs of students in rural communities, creating self-directed professional development practices, using a variety of resources and technology to reduce the barriers of isolation, and functioning effectively in community service areas other than teaching. Both Barker and Beckner (1987) and Monk (2007), whose studies are described earlier, see the need to better incorporate rural teaching into teacher preparation programs.

As previously noted, Monk (2007) suggests a “grow your own” strategy, where teacher preparation programs recruit prospective teachers from rural areas, and in some cases make course arrangements to allow them to stay in their area

**Rural educators have long been calling for special preparation for new teachers to teach in rural schools**

while they pursue their education. Boyd et al. (2005), in an analysis of labor markets in New York State, found that proximity to home matters because new teachers seek positions if not at home, at least in regions “similar to those where they grew up” (p. 127).

## PROGRAM COMPONENTS IN THE CENTRAL REGION

Researchers identified five program components intended to help rural schools recruit and retain a highly qualified workforce (see box 1 on study methods and limitations):

- Options for obtaining multiple-subject certification.
- Access to teacher preparation for prospective rural teachers.
- Recruitment of prospective teachers in rural areas.
- Practice-teaching placement in rural schools.
- Courses focused on rural issues.

Of these five components, the first, obtaining multiple certification, is intended to prepare new teachers to accept a rural position that requires teaching more than one subject. The second and third components on reaching out to prospective teachers already in rural locations are intended to produce graduates who would remain in their home areas. Monk (2007) refers to this as a grow-your-own strategy. The fourth and fifth components on exposing in-service teachers to rural life through placements or rural coursework are intended to alleviate new teacher turnover. Liu and Johnson (2006) note that being surprised by the conditions of the job likely contributes to dissatisfaction and turnover.

**Researchers identified five program components intended to help rural schools recruit and retain a highly qualified workforce**

This section briefly describes these components, focusing on teacher education programs. The descriptions are based on telephone interviews with respondents in nine schools of education and on the documentation respondents provided (see appendix A for information on method, sample, and data limits and appendix B for interview protocols). These telephone interviews identified three critical areas of teacher shortages in rural locales: English as a second language, special education, and math and science. This report also describes programs designed to meet the need for teachers in these three areas. Respondents were not systematically asked about evidence of program effectiveness, and such information was not readily available. So, again, no claim can be made for the effectiveness of these practices. These examples do, however, suggest areas for future research.

### Options for obtaining multiple-subject certification

Out-of-field teaching and the geographic isolation of rural settings present special challenges for rural schools and districts. Teachers in rural schools might not be fully qualified, as defined under the No Child Left Behind Act, for all the subjects they teach, yet they will likely find obtaining needed qualifications through professional development difficult. Each of the three programs described here has a slightly different approach to offering prospective teachers ways to obtain multiple certifications. One institution focuses on both in-service and preservice teachers. The other two provide opportunities for preservice teachers only.

At Adams State College (Alamosa, Colorado) Partnering Across Regions to Nurture Equity and Relevance (PARTNERS) prepares in-service teachers for dual endorsements in special education and literacy, language, and culture. This master’s level, grant-funded program has trained 60 teachers between 2003 and 2007. It uses both distance learning technology and onsite classes on weekends so that prospective teachers can continue to live in rural communities in southern Colorado while obtaining their degree. Adams State also encourages undergraduates seeking a license in

## BOX 1

**Study methods and limitations**

Researchers scanned publicly available materials from teacher preparation institutions in the Central Region to determine how the institutions reported their efforts in preparing teachers for rural schools. While this preliminary scan revealed limits on what could be learned solely from these materials, the results did inform the choice of components to be studied, also informed by Barker and Beckner (1987) and Monk (2007).

Barker and Beckner (1987) selected 10 areas based on the literature about what might support preparation for teaching in rural schools and sent a survey to 473 public four-year colleges and universities asking respondents to indicate the degree of emphasis their program placed on each area. From this list, three areas were included as components for this study (multiple-subject certification, courses on rural issues, practice-teaching in rural schools). Areas were excluded if they were applicable to all schools rather than mainly or solely rural schools or if examination of the literature indicated limited data availability.

Monk (2007), drawing on social and economic statistics for rural areas and the 2003/04 Schools and Staffing Survey, offers six policy options to help rural schools address the challenges of improving student performance and retaining a qualified teacher workforce. The two options included as components

in this study are those that teacher preparation institutions could use to support graduates in accepting rural positions and staying in rural schools (rural recruitment and access to teacher preparation in rural areas).

Following this review of the literature and identification of teacher preparation program components, researchers sought to identify and describe the five components within a sample of Central Region teacher preparation programs. Publicly available materials were gathered from web sites of the 120 teacher preparation institutions in the Central Region. Researchers created a table that included each institution and whether they found any materials with a rural focus.

Twenty-eight institutions were selected based on materials indicating that their teacher education program addressed teacher preparation for rural schools. A rural focus was confirmed by a single phone call to the education department of each institution. A rural component could not be confirmed in 11 of the 28 selected institutions, so these programs were dropped from the sample.

Of the 17 programs 9 were found to have three or more rural program components, the cutoff point for inclusion in the study. Representatives of these nine institutions were interviewed to learn more about the program components. The descriptive information on the nine teacher education programs that support the recruitment and retention of

rural teachers was gathered primarily through in-depth telephone interviews with knowledgeable respondents. Researchers used a systematic approach to identifying relevant program components, strategies, and initiatives from web searches and to identify the respondents best able to discuss these components in detail. In-depth interviews with administrators at the schools of education were the primary source of information on teacher preparation programs that include a rural component.

Three limits of this study should be noted. First, if the public materials for the 120 teacher preparation programs reviewed did not contain information on recently implemented rural program components, or if the language in those materials did not clearly indicate a rural focus, the institutions were eliminated from the sample. Thus the institutions identified in this report are likely not the only ones in the region that make an effort to address preparing teachers to teach in rural areas. Second, confirmation of program components for the 28 teacher preparation programs was limited to simply substantiating that rural programming existed. So, the report may not accurately represent all of the components that exist under a variety of auspices in the schools. Third, these program components have not been rigorously studied to determine their effectiveness. So, no assumptions can be made about whether they are effective in preparing and placing teachers in rural schools.

a secondary education content area to look into an additional endorsement, especially in such shortage areas as social studies, math, science, and special education.

Wichita State University (Wichita, Kansas) allows prospective teachers with majors in content-shortage areas to work for school districts while completing their certification requirements. This includes only secondary-level content areas for which endorsements are available to undergraduates.

A respondent from the University of Nebraska–Kearney reported that the university has “streamlined the program in order to make it easier to get a double major.” He noted that about 80 percent of students accepted to the teacher education program now seek a double major. “This really

speaks to the rural mentality,” he noted, because “schools need teachers to do more than one thing.” The teacher education program at Kearney also offers a “broad field endorsement,” in contrast to a content area endorsement. For example, an endorsement in the broader field of “social studies” offers more flexibility than an endorsement in a more specific area within that field.

#### Access to teacher preparation for prospective rural teachers

Rural teachers who are not fully qualified and prospective teachers who continue to live and work in their rural communities need access to professional development programs to meet the “highly qualified teacher” provision of the No Child Left Behind Act. Online coursework is an important part of professional development programs that provides access to rural educators. Seven of the nine institutions use online courses. In addition, courses offered at community colleges or on satellite campuses bring opportunities closer to rural areas. Four of the nine programs work with community colleges to improve access to coursework.

Adams State College (Alamosa, Colorado) has the only Rural Education Access Program (REAP) that has continued to operate beyond the end of its state-funded grant. Participants receive an associate’s degree at a junior or community college and then transfer to Adams State for their final two years of coursework and practice-teaching. A cadre of experienced adjunct faculty deliver instruction onsite at the two-year colleges. Eliminating the need to travel to the Adams State campus substantially eases entry into the profession for residents in these areas. REAP graduates receive a bachelor’s in interdisciplinary studies, with Colorado licensure in elementary education. The program emphasizes literacy. Since 2000 the program has awarded degrees to about 250 individuals. Adams State’s Elementary Education Teacher Preparation Program, a smaller program with a structure and requirements identical to those of REAP, is a partnership among Adams State College, Arapahoe Community College, and Douglas County Schools.

Wichita State University (Wichita, Kansas) offers the Preparing Educators Together program, developed in response to rural school district requests for assistance in addressing teacher shortages. It allows prospective teachers to pursue an elementary education degree and teaching license by taking Wichita State coursework on two campuses of a local community college. Improving access to teacher education by eliminating the barrier posed by a long commute to Wichita, the program offers the one affordable option for a teaching degree in that part of south-central Kansas. Participants first obtain an associate’s degree from Cowley College and then take Wichita State core classes at a Cowley campus for the next three semesters. Wichita State presents courses on one campus, and interactive television technology allows students to participate at a second campus. Graduates receive a bachelor’s in education from Wichita State and are licensed to teach preK–6.

Southeast Missouri State University (Cape Girardeau, Missouri) partners with community colleges, thereby allowing them to offer an associate’s

**Rural teachers who are not fully qualified and prospective teachers in rural communities need access to professional development programs to meet the “highly qualified teacher” provision of the No Child Left Behind Act**

degree in teacher education. Students can then transfer to the university as juniors. In addition, the Extended Studies Department has courses almost entirely conducted at a distance. Other “blended” classes combine distance and campus classes and activities. Prospective teachers also have access to university programs through satellite campuses, including one located in the “boot heel” of the state.

### Recruitment of prospective teachers in rural areas

Rural recruitment is one way to identify and enroll prospective teachers from rural areas in teacher preparation programs. Motivating this approach is the notion that a teacher recruited from a rural area will be more likely to return to a rural area. Four institutions in the Central Region offer such programs, sometimes tailored to specific regional needs.

The University of Nebraska–Lincoln has had a program for American Indian students since 1999, graduating 19 educators as of 2007 who are working in their rural American Indian communities. It has also developed a program to recruit minority and bilingual paraprofessionals and enroll them in English as a second language programs.

The university operates the Indigenous Roots Teacher Education Program, funded through a \$750,000 grant from the U.S. Department of Education, to produce 12–15 certified elementary school teachers to teach in American Indian schools. The program targets American Indian paraprofessionals and other American Indians with experience working with children. Participants must have an associate’s degree, though the program allows exceptions. The new instructors are trained to develop curricula that integrate American Indian language and culture, in an attempt to engage students more fully. The hope is to develop role models who will improve students’ academic success and motivate them to stay in school. An underlying goal is strengthening the education system in American Indian communities. Partners in this effort include American

Indian schools in four northeast Nebraska communities.

Indigenous Roots allows prospective teachers to remain in their communities. There is a core set of classes, though the program is tailored to the individual, who can take classes at two nearby tribal community colleges. Participants receive stipends, money for books, access to computer labs, and tuition is waived. They work with cooperating teachers and site coordinators who provide mentoring throughout the program. Graduates receive a B.S. in elementary education, with endorsements in K–8 elementary and K–12 English as a second language. They receive assistance in securing their teaching licenses and induction services that include ongoing mentoring. The program builds on the success of an earlier initiative, the Native American Career Ladder, whose 19 graduates now serve as classroom teachers or in other leadership roles in their schools and communities.

**Rural recruitment is one way to identify and enroll prospective teachers from rural areas in teacher preparation programs**

The University of Nebraska–Lincoln developed the Northeast Nebraska Para-Educator Career Ladder project in 2003. Because of the rapid growth of the meatpacking industry, northeast Nebraska has experienced a substantial increase in its minority population. The increase is especially acute in rural areas of the state, where school districts have few or no bilingual (primarily Spanish) teachers or English as a second language–endorsed teachers. Having bilingual or culturally similar teachers has been associated with improved academic achievement.

Para-Educator Career Ladder addresses the difficulties facing rural school districts in identifying minority and bilingual teachers by training and granting degrees to paraprofessionals in rural schools. The University of Nebraska–Lincoln Department of Teaching, Learning, and Teacher Education formed a consortium with several

partners, including two community colleges and Wayne State College, to train 30 paraprofessionals. Most of the basic education courses are taken at the community colleges, delivered to participants in their communities, primarily through two-way interactive and other distance education systems, with additional face-to-face sessions each semester. The elementary school para-educators work with a mentor teacher in their home districts beginning in their sophomore year. The first group of participants will be doing its student teaching in fall 2007. Eleven of the participants are expected to graduate with a bachelor's degree in elementary education and a supplemental endorsement in English as a second language.

Southeast Missouri State University (Cape Girardeau, Missouri) uses alternative certification to address teacher recruitment and retention in rural areas. College graduates with the appropriate level of content knowledge can complete required teacher education courses while teaching full time. Faculty meet with candidates to ensure that content area requirements are mastered and then guide participants as they complete a sequence of online courses to satisfy state certification requirements. In 2007, 170 participants were seeking alternative certification, with the highest number of alternative certifications in special education.

A respondent pointed out that “rural districts have trouble recruiting and keeping teachers. If you can find a local person with some content specialty and hire them...[they] are more likely to stay in their hometown. [This may be] more successful than trying to recruit and retain others who are not from the area.”

The University of Nebraska–Kearney offers post-baccalaureate teacher certification that “really meets a need for rural schools,” according to one administrator. The program coordinator added that “[t]he program is ideal for people who want to keep their day jobs while earning a teaching certificate.” Candidates with a baccalaureate submit their

transcripts for a review of content area coursework. (Gaps in content area coursework must be filled.) The program was created by condensing the institution's teacher education courses and creating three sequential six-hour online classes. After completing the third class, candidates do their student teaching. The program, which takes a minimum of four semesters to complete, includes some in-school observation during the coursework period and community service learning outside the classroom so that participants gain more experience in working with children.

At Mesa State College (Grand Junction, Colorado) the Intensive Post-Baccalaureate Licensure Program prepares elementary education teachers. Program literature defines prospective candidates as “prospects already teaching in schools on emergency licensures,” “prospects working in a school as an aide or volunteer,” and “prospects interested in a career change.” According to the director, “virtually 100 percent [of the participants] are working in rural sites.” A team of four faculty members works closely with a single cohort over a 12-month period that involves face-to-face meetings, online coursework, mentoring, and 15 weeks of practice teaching.

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### Practice-teaching placement in rural schools

The institutions cited in the programs described in the following vignettes were selected for the strength of their rural programs. It is not surprising, then, that several of these programs require preservice teachers to carry out a practice-teaching placement in a rural school. In addition, seven of the nine institutions described are either in a rural community or near one, making rural placements natural.

Three programs described their rural placements. These three programs explicitly seek opportunities to expose their student-teachers to rural teaching. Other institutions do not deliberately assign student-teachers to rural schools, but these experiences are available through partnerships with a variety of schools. The teacher education

**Three programs that were reviewed explicitly seek opportunities to expose their student-teachers to rural teaching**

programs often are heavily field-based, and the institutions have relationships with both urban and rural schools. Undergraduates in these programs typically have three or four field placements and practica, including student teaching, some in rural schools.

Wichita State University (Wichita, Kansas), which provides placements mainly in urban settings, also partners with rural school districts. A respondent estimated that about 40 percent of elementary education majors in the university's campus-based program rotate through a rural school at some point. All students in its Partners in Education initiative, an undergraduate program in which prospective teachers take classes at a community college partner campus, satisfy the student teaching requirement in a rural school.

Minot State University (Minot, North Dakota) emphasizes diverse practice-teaching placements. According to respondents there, the teacher education program requires undergraduate students to gain experience in both a large and small district. The location of the university means that one of these placements will occur in a rural school.

A respondent from Pittsburg State University (Pittsburg, Kansas) said, "by virtue of our location, placements are primarily in rural areas. Right now we have 124 student teachers, half elementary and half secondary. Only 12 of the 124 are not in rural areas."

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### Courses focused on rural issues

Although Barker and Beckner (1985) indicate that offering courses focused on rural issues could promote an interest in teaching in rural areas, rural coursework was not commonly used to prepare candidates for rural teaching. The primary reason appears to be that many of the institutions are in areas that recruit students already familiar with rural life.

There were a few reported "rural courses," but generally these were in other departments of the

university and were not required of teaching candidates. The University of North Dakota offers Sociology of Rural Life for any interested student, and several institutions indicated that rural issues are addressed within their education courses.

**Although courses focused on rural issues could promote an interest in teaching in rural areas, rural coursework was not commonly used to prepare candidates for rural teaching**

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### Areas of critical teacher shortages

Program representatives were also asked about their courses and about opportunities for students to obtain credentials in three areas that are critical shortage areas for rural schools. The first is for math (45.5 percent of schools) and physical science (42.5 percent of schools). Central Region rural high schools report having difficulty filling vacancies in each of these subject matters (developed from 2003–2004 Schools and Staffing Survey). The second is for teachers of English as a second language. Almost 45 percent of rural high schools in the Central Region report that filling these vacancies is very difficult or that they were unable to do so.

Special education with 33 percent of Central Region rural high schools reporting difficulty filling special education vacancies is eighth among the 11 subjects surveyed; however, several institutions offer programs for this area. Therefore information about these programs is also included.

*Math and science.* The University of Nebraska–Lincoln expects to engage 130 middle school math teachers in Math in the Middle, a program to enhance participants' content knowledge and pedagogical skills. This five-year initiative prepares teachers to become catalysts in improving students' math skills. The university trains instructors to become "intellectual leaders in their school districts" and to "build partnerships between higher education and the schools." The program is funded by a \$5 million National Science Foundation grant. The principal investigator

reports that, in composing the grant application, faculty “made a conscious decision to place [a strong] focus on rural schools,” and that “making a special contribution to rural education is a priority.” The program now works with 14 rural service districts in Nebraska, as well as the Lincoln Public Schools.

In another demonstration of commitment to rural teacher preparation, the program hosted a rural education conference in the first and third years of the grant; another conference is planned for the final year of the project. Participants receive a master’s degree at the end of a 25-month program that requires 12 courses over seven semesters. Each cohort of 30–32 teachers takes distance courses over two academic years and attends one or two intensive, five-week summer sessions on campus. Grant money covers travel expenses, housing, meals, and a \$1,000 weekly stipend for the time spent on campus. Faculty members provide a high level of support to participants throughout the program. Math in the Middle graduated its first cohort in the summer of 2006.

In June 2007 the University of North Dakota (Grand Forks, North Dakota) began a three-year program to increase the state’s pool of qualified science and math teachers in response to severe statewide shortages. Science, Engineering, Math, and Teaching will use its \$1.5 million grant from the North Dakota Department of Public Instruction to train teachers from rural schools, Native schools, and districts designated as “high need.” The grant’s principal investigator stated that several school districts in this largely rural state have been unable to hire fully licensed science teachers. The program’s approach addresses content and teaching skills, so teachers are better able to improve students’ literacy in science and math. Participants select one of five areas of concentration: high school biology, chemistry, or physics, or middle school math or science. Instruction is delivered through online courses during one academic year and lab sessions on campus.

Participants select one of five areas of concentration: high school biology, chemistry, or physics, or middle school math or science. Instruction is delivered through online courses during one academic year and lab sessions on campus.

**The need for teachers of English language learner students is acute both nationally and in the Central Region**

One program goal is to cultivate “lasting professional partnerships between participating teachers and a group of highly qualified UND faculty.” Faculty will maintain regular communication through web conferencing and by visiting teachers in their schools. Participants receive financial assistance: food, travel, lodging during summer lab sessions, tuition and fees, and a modest stipend. Upon completion, participants receive 15 graduate credits, a graduate certificate, and certification in a content area. The program is open to licensed teachers who wish to update their teaching licenses and to those seeking a new certificate or license. At the time of a telephone interview in May 2007, 50–55 of the 80 slots had been filled.

*English as a second language.* The need for teachers of English language learner students is acute both nationally and in the Central Region. The University of North Dakota (Grand Forks, North Dakota) has an undergraduate English language learner program on campus and a grant-funded, postgraduate program online that is specifically designed to train teachers in rural areas. One respondent stated that the graduate program was created because of a “huge shortage of [English language learner] teachers in rural North Dakota, especially in the north.” She explained that several factors contribute to the need for more classroom teachers with English language learner training. Although American Indians are the predominant English language learner population in the state, there is an increasing Spanish-speaking population working in agriculture. At the same time the schools are challenged to meet the needs of growing numbers of immigrants, including Bosnian, Sudanese, Ethiopian, and other African refugees. The respondent added that other non-native English speakers are drawn to North Dakota because of employment opportunities, inexpensive housing, and safety. But communities and schools are not prepared adequately to assist English language learner students.

Most participants in the online graduate English language learner program at the University of North Dakota take two courses during each of



three semesters to acquire the 17 credits needed for certification. (Participants who wish to go further can apply these online credits toward a graduate degree in reading; the reading components are not yet available online.) The English language learner program includes a networking feature that is especially helpful to teachers who work in isolated areas. The respondent noted, “Many times there is a lone person out there. When they run into teachers who have an attitude about modifying classes for English language learners, the program prepares them to work on where to go for networking support.” Three cohorts, with a total of 60 teachers, have enrolled in the program. Most participants are elementary and secondary school teachers who return to their classrooms better prepared to assist English language learner students. Others have taken on coordinator roles in their schools or districts.

Mesa State College (Grand Junction, Colorado) has recently been authorized to offer an English as a second language endorsement package as part of a master’s program. The recent influx of immigrants to the expanding oil and gas development areas along the I-70 corridor spurred the decision to create the program. The director of teacher education says that “we are taking this to the rural areas . . . and we will attract them just by offering the program.” Pittsburg State University (Pittsburg, Kansas) already offers a master’s program for English as a second language teachers. Using grant money, the university is strengthening its undergraduate program by offering English as a second language as a minor area of concentration.

English as a second language training is an important part of several other rural teacher preparation programs. Since 2002 Adams State College (Alamosa, Colorado) has managed Rural Educators Accelerating Development of English Language Acquisition (READ-ELA). This Title III grant program helps teacher serve “linguistically different students” through training that leads to the Colorado State Reading endorsement with an emphasis on English as a second language. Participating teachers in this master’s program work

in rural areas; most enter the program with an elementary education teaching license. By December 2007, 120 teachers were trained.

*Special education.* The telephone interviews revealed that special education is most often available as a minor area of concentration or as a separate endorsement for elementary education majors at the undergraduate level. States vary greatly in their requirements for certification of special education teachers, and as a result institutions vary greatly in their approach to training them.

**States vary greatly in their requirements for certification of special education teachers, and as a result institutions vary greatly in their approach to training them**

The University of North Dakota (Grand Forks, North Dakota) offers a two-year Resident Teacher Program in Special Education. This program, which received the 2006 American Council on Rural Special Education Exemplary Program Award, seeks to fill the shortage of special education teachers in the state. The university web site states that the Resident Teacher Program in Special Education “seeks to attract and keep teachers in rural schools . . . by enabling a target population of home grown prospective teachers who are already certified teachers to participate” in a two-year program, a partnership of the university and local school districts. The program, which has been part of two different federal grant awards, also receives funding from the state and from the 11 partner school districts.

The program recruits participants already certified in another area, many of them recent graduates of the university. The participants spend two weeks on campus the first summer and then a full year as interns in partner schools under the supervision of mentor special education teachers and a university faculty member. To complete their coursework, they participate for two years in online courses through an interactive video network. The districts where the participating teachers work commit money to the university, the cost being

about the same as that of supporting a paraprofessional. The university then waives tuition for the participating teacher.

According to the program director, the state is very supportive of the program, but the school districts “are even more so. They were a strong voice a few years ago when the university thought of dropping the program.” Because of the use of federal grants, the program has been evaluated several times. In 2006 a survey reported that 97 percent (145) of the program graduates have been employed as special education teachers in 15 states. In North Dakota it is not possible to obtain a special education license at the undergraduate level. The candidate must first be credentialed as a general education teacher. According to the program director, this makes it difficult “when teachers move here from other states.” She added that undergraduates interested in special education can do an internship for one semester that is “similar to student teaching, but not nearly as in-depth.”

Minot State University (Minot, North Dakota) also provides a Special Education Resident Teacher Program, which, though smaller, shares many features with the University of North Dakota program. Teachers licensed in other content areas participate in a practicum during the school year and work with a special education mentor while completing graduate coursework online through interactive videos or a similar mode during the school year and summer sessions. Most resident teachers complete the master’s program in one calendar year plus one semester. The Special Education Department works with about five resident teachers each year and typically has almost 100 graduate students actively engaged in its programs. At the undergraduate level about 50 students are enrolled in a program that awards a bachelor’s in education with a specialization in mental retardation. All undergraduate special education majors hold double majors, most often in special education and elementary education.

Demanding, the program requires 160 credit hours.

A critical need for special education teachers in American Indian schools, typically in rural settings, was the impetus for the United Tribes Special Education Project. As stated in program documents, the objective of the \$1.1 million grant is “to increase the number of American Indian special educators in the state” by supporting “a special education: learning disabilities and early childhood special education program.” The University of North Dakota wrote the grant application and plays a major role in the project, as the subcontractor, together with the grantee, the United Tribes Technical College (Bismarck, North Dakota). This multiyear grant program engages 17 American Indian educators in several districts who were scheduled to receive graduate degrees in May 2008. To participate in the two-year program, individuals must hold tribal membership, a preK–12 teaching license, and a position in a reservation school or a school in which 25 percent or more of the students are American Indian. Participants attend classes on campus for two summers, take other courses online or through an interactive video network, work with a mentor, and complete a presentation related to special education or inclusive education at the end of the program. The grant supports tuition and university fees, textbooks and course materials, travel expenses, and a stipend.

The University of Nebraska–Lincoln offers a joint major in elementary education and special education. Adams State College has recently developed a new undergraduate program in interdisciplinary studies, with elementary licensure and a special education endorsement. It also operates a master’s program that leads to a dual endorsement in special education and language literacy and culture. The Partnering Across Regions to Nurture Equity and Relevance program emphasizes effective instructional practices for culturally and linguistically diverse students who also have disabilities.

## APPENDIX A

### RESEARCH METHOD, SAMPLE, AND LIMITATIONS

This appendix reviews the research method, sample, and the study limitations.

#### Research method

Researchers first scanned publicly available materials from teacher preparation institutions in the Central Region to determine how they reported their efforts in preparing teachers for rural schools. This preliminary scan revealed limits on what could be learned solely from these materials. The materials varied widely—from program flyers to general paragraphs about course offerings. Where grant-funded programs focused specifically on preparing teachers for rural schools, there was usually more description of the program, such as course requirements, locations for courses, and availability of courses online. The full results of this scan are reported in the sample section below. The results, taken largely from Barker and Beckner (1987) and Monk (2007), also informed the focus of this study.

Several Education Resources Information Center (ERIC) searches were conducted using the search terms “rural and teacher preparation” and “rural and teaching,” to develop an initial set of articles to examine. The reference lists of the articles were then searched to identify additional relevant literature. Each article was reviewed to determine the nature and quality of the material. Except where noted, opinion pieces were not retained.

There has been little research on preparing teachers to work and stay in rural communities. Wilson, Floden, and Ferrini-Mundy (2001, p. 34), in their extensive review of teacher preparation research, note that “very little research has paid careful attention to the question of preparing teachers to teach in urban and poor rural areas.”

Barker and Beckner (1987) sent a survey to 473 public four-year colleges and universities (64.7 percent response rate). The survey asked

respondents to indicate the degree of emphasis their program placed on each of the 10 areas selected based on the literature about what might support preparation for teaching in rural schools.<sup>6</sup> These areas are listed in table A1, along with the percentage of the respondents who indicated that they placed considerable or great emphasis on the area. In addition, the table includes a judgment by the research team on whether an area is more likely to occur in rural schools, is unique to rural schools, or is of value in all school settings. Finally, areas included in the focus of this study are noted. Areas were excluded when the area was applicable to all schools rather than mainly or solely to rural schools or when examination of the literature indicated limited data availability.

Monk (2007) pulls together social and economic statistics for rural areas and draws on the 2003/04 Schools and Staffing Survey data to present recent findings on teacher quality issues for rural districts. He notes that the No Child Left Behind Act increased the pressure on rural schools to improve student performance and to retain a qualified teaching workforce, and he offers six policy options to help rural schools address these challenges (table A2). Four of these options apply to districts. Two are options that teacher preparation institutions could use to support graduates accepting rural positions and staying in rural schools and are included in the focus of this study.

In suggesting the grow-your-own option, a 2003 New York State study by Monk cites Boyd et al. (2005, p. 163) showing that “teachers want to teach in schools where they grew up and prefer areas like their hometowns.” Thus teacher preparation institutions might recruit prospective teachers from rural areas in the hope that they would return to such areas to teach.

For the sixth policy option Monk suggests that teacher preparation institutions partner with rural schools and districts to place prospective teachers in rural settings to “break down negative stereotypes about teaching in rural schools” (p. 169). Researchers selected these last two policy options,

TABLE A1  
**Areas of emphasis in teacher preparation and their role in the rural education environment**

Area addressed in teacher preparation programs	Institutions reporting considerable or great emphasis (percent)	Included in this study's focus?
1. Teaching with limited resources	52.0	No (limited data)
2. Being prepared in two or more content areas	67.4	Yes (multiple-subject certifications)
3. Providing exposure to a course in rural sociology	12.3	Yes (courses on rural issues)
4. Offering special courses related to rural teaching	13.0	Yes (courses on rural issues)
5. Offering practicum or student teaching in a rural setting	28.7	Yes (practice teaching in rural areas)
6. Offering practical methods courses	94.3	No (all schools)
7. Training in guidance and counseling	31.2	No (all schools)
8. Training in teaching two or more grade levels in the same room	16.5	No (limited data)
9. Training to recognize and refer exceptional children	84.2	No (all schools)
10. Training that helps teachers understand the role of the community in American society	64.9	No (limited data)

Source: Barker and Bechner 1987.

TABLE A2  
**Policy options for school districts or teacher preparation programs**

Policy option	District or teacher preparation	Included in this study's focus?
1. Offering higher wages	District	No
2. Removing the underlying conditions that make rural schools hard to staff	District	No
3. Reorganizing schools and districts into larger units	District	No
4. Improving basic human resource processes	District	No
5. Growing-your-own strategy	Teacher preparation	Yes (rural recruitment)
6. Partnering with colleges and universities	Teacher preparation	Yes (access to teacher preparation in rural areas)

Source: Monk (2007).

which are directed toward teacher preparation institutions, and broadened the sixth option (partnering with colleges and universities) to include a variety of ways to improve access to teacher preparation for people in rural areas, such as distance learning, designating it as “rural access.” Table A3 identifies and defines the five components obtained from these two articles.

Researchers next sought to identify and describe the five components within a sample of Central Region teacher preparation programs.

### Sample

Publicly available materials were gathered from web sites of the 120 teacher preparation institutions in the Central Region and reviewed by Central Regional Educational Laboratory staff. These materials varied in type and amount. They included, for example, FAQ sheets (typically about grant-funded rural programs), application materials with brief program descriptions, announcements of conferences, and news releases. A table was created that included each institution

TABLE A3

**Defining program components from the literature to help rural schools retain highly qualified teachers**

Program component	Reference in the literature	Definition
Options for obtaining multiple-subject certifications	Barker and Beckner (1987)	Offering coursework to help rural teachers obtain certification in multiple needed content areas.
Access to teacher preparation for prospective rural teachers	Monk (2007)	Offering initial or advanced teacher preparation courses in settings and at times that allow prospective teachers based in rural schools to attend.
Recruitment of prospective teachers in rural areas	Monk (2007) Boyd et al. (2005)	Recruiting prospective teachers from rural communities to teacher preparation programs with the assumption that they might be more likely to accept a teaching position in rural schools and recruiting rural paraprofessionals to become certified teachers.
Practice-teaching placement in rural schools	Barker and Beckner (1987), Monk (2007)	Offering optional or required practice teaching in a rural school.
Courses focused on rural issues	Barker and Beckner (1987)	Providing academic courses that contain explicit content on rural communities, schools, and teaching.

and whether any materials with a rural focus were found. Twenty-eight institutions were selected based on materials indicating that their teacher education program addressed teacher preparation for rural schools (table A4).<sup>7</sup> No indication of a focus on rural teacher preparation was found on the web sites of the 92 institutions not selected.

A rural focus was confirmed by a single phone call to the education department of each institution in spring of 2007; multiple calls were not made. This list is not exhaustive. A rural component could not be confirmed in 11 of the 28 selected institutions, so these programs were dropped from the sample. The absence of confirmation might reflect programs that the education department contact was unaware of—or that the department does not consider to have a rural focus, even if some relevant elements are present.

For 17 institutions at least one component of rural teacher preparation was identified and confirmed (table A5). One state had one such institution, two had two, and four had three. Of the 17 programs 9 were found to have three or more rural program components (identified in table A5). Representatives of these nine institutions were interviewed to learn more about the

program components. (The interview protocol can be found in appendix B.) For each instrument the table indicates the locale of the institution based on U.S. Census data, as well as the number of teachers completing their degree each year. Only one institution indicated that it offered rural coursework. Most of the 17 offered rural placements, which typically appeared to be the only component offered by institutions that were not interviewed.

The descriptive information on the nine teacher education programs that support the recruitment and retention of rural teachers was gathered primarily through in-depth telephone interviews with knowledgeable respondents at several institutions. Researchers used a systematic approach to identify relevant program components, strategies, and initiatives—and to identify the respondents best able to discuss these components in detail. They reviewed the web sites for each of the nine institutions thoroughly and identified institutional characteristics. Next, they perused the web pages for the schools of education, looking specifically for information on teacher education programs. They then performed keyword searches and looked for links to rural initiatives in other departments to identify coursework and potential relationships

TABLE A4

**Confirmation of rural component by institution**

State and Institution	Basis for selection	Rural focus confirmed?
<i>Colorado</i>		
Metro State College <sup>a</sup>	Public materials	No
Colorado State University <sup>a</sup>	Land grant university and public materials	No
Adams State College	Public materials	Yes
University of Colorado <sup>a</sup>	Public materials	No
Mesa State College	Public materials	Yes
<i>Kansas</i>		
Kansas State University	Land grant university	Yes
University of Kansas <sup>a</sup>	Prepares largest number of teachers in state annually	No
Emporia State University <sup>a</sup>	Public materials	No
Pittsburg State University	Public materials	Yes
Wichita State University	Public materials	Yes
<i>Missouri</i>		
Missouri Baptist University	Public materials	Yes
Southeast Missouri State	Public materials	Yes
Central Missouri State University <sup>a</sup>	Public materials	No
Missouri State University	Land grant university	Yes
Missouri Southern <sup>a</sup>	Public materials	—
University of Missouri <sup>a</sup>	Public materials	—
<i>Nebraska</i>		
Nebraska Wesleyan University <sup>a</sup>	Public materials	No
University of Nebraska—Omaha <sup>a</sup>	Public materials	No
University of Nebraska—Lincoln	Land grant university and public materials	Yes
University of Nebraska—Kearney	Public materials	Yes
Wayne State University	Public materials	Yes
<i>North Dakota</i>		
Minot State	Public materials	Yes
University of North Dakota	Public materials	Yes
North Dakota State	Land grant university	Yes
Northern State University	Public materials	Yes
University of South Dakota <sup>a</sup>	Prepares largest number of teachers in state annually	No
<i>South Dakota</i>		
South Dakota State University	Land grant university	Yes
<i>Wyoming</i>		
University of Wyoming	Land grant university	Yes

— indicates unable to reach a respondent.

a. Confirmation of the presence or absence of a rural component was not obtained.

Source: Authors' search of web sites of the listed institutions.

TABLE A5

**Confirmed rural teacher preparation component, by institution and locale**

State and institution	Locale	Teachers a year <sup>a</sup>	Additional certification	Rural access	Rural recruitment	Rural placement	Rural coursework
<i>Colorado</i>							
Adams State College (Alamosa) <sup>b</sup>	Rural	85	✓	✓	✓	✓	
Mesa State College (Grand Junction) <sup>b</sup>	Large town	135	✓	✓	✓	✓	
<i>Kansas</i>							
Kansas State University (Manhattan)	Large town	400				✓	
Pittsburg State University <sup>b</sup>	Large town	—	✓	✓	✓	✓	
Wichita State University <sup>b</sup>	Large city	—	✓	✓	✓	✓	
<i>Missouri</i>							
Missouri Baptist University (St. Louis)	Large city	110				✓	
Southeast Missouri State University (Cape Girardeau) <sup>b</sup>	Large town	274	✓	✓	✓	✓	
Missouri State University (Springfield)	Large city	400				✓	
<i>Nebraska</i>							
University of Nebraska (Lincoln) <sup>b</sup>	Mid-size city	250	✓	✓	✓		
University of Nebraska (Kearney) <sup>b</sup>	Large town	175	✓	✓	✓	✓	
Wayne State University	Small town	135			✓		
<i>North Dakota</i>							
Minot State University <sup>b</sup>	Large town	120	✓	✓	✓	✓	
University of North Dakota (Grand Forks) <sup>b</sup>	Large town	120	✓	✓	✓	✓	✓
North Dakota State University	Mid-size city	100				✓	
<i>South Dakota</i>							
Northern State University (Aberdeen)	Mid-size city	125				✓	
South Dakota State University (Brookings)	Small town	100				✓	
<i>Wyoming</i>							
University of Wyoming (Laramie)	Mid-size city	275				✓	

— indicates respondent was unable to confirm the presence or absence of the element.

a. Reported by contact in 2006, this is an estimated annual level of new teacher graduates.

b. Selected for program descriptions because they have three or more rural-related components in their teacher preparation programs.

Source: Authors' search of web sites and interviews with presentatives of the listed institutions.

and collaborations with teacher education programs. Most often, these rural initiatives or “centers” focus on rural economic development and agriculture and are not involved in rural teacher preparation.

In-depth interviews with administrators and faculty at the schools of education were the primary and most valuable source of information on teacher preparation programs that include a rural component. Knowledgeable respondents were identified in several ways. At some institutions appropriate contact persons were clear. In others it was necessary to call the general number for the teacher education department, provide a brief introduction to the study, and ask a series of screening questions to identify the staff member best able to discuss such issues as rural coursework, rural access, and recruitment. This approach often required brief conversations with more than one individual before researchers were directed to appropriate informants. Respondents included deans, faculty, program managers, and administrative staff. The length of interviews varied widely. None was shorter than 40 minutes, and some exceeded one hour.

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### Limitations of the study

Three limitations of this study should be noted. First, if the public materials for the 120 teacher preparation programs reviewed did not contain information on recently implemented rural program components, or if the language in those materials did not clearly indicate a rural focus, the institutions were screened out of the sample. It is thus probable that some programs eliminated from the study had a focus on teaching in rural schools. So this report does not claim that the institutions identified in this report are the only ones in the region that address preparing teachers to teach in rural areas. They are, however, a sample of such efforts. Second, confirmation of program components for the 28 teacher preparation programs was limited to simply confirming that rural programming existed. So, the report may not accurately represent all of the components that exist under a variety of auspices in the school of education or in the larger university context. Third, these program components have not been rigorously studied to determine their effectiveness. So, no assumptions should be made about whether they are effective in preparing and placing teachers in rural schools.



## APPENDIX B INTERVIEW PROTOCOL

### Screening

Through an initial literature search, your institution appears to have several strategies of interest for preparing teachers to teach in rural areas, and we would like to find appropriate people to talk to. (Name the components from the web search). We would like to schedule 30–45 minute telephone interviews with respondents who are knowledgeable about these programs.

### Respondent

May I ask you some general questions that will help me to understand the program?

1. From information on your web site, it appears that you (name and describe the component). We are interested in learning about the program in detail. Probe for as many of the following as possible:
  - When was it developed?
  - Why was it developed (what need does it fill)?
  - How many participants?
  - How does it work?
  - How is success judged?
  - Other sources of information about the program?

2. How do you track the need for teachers in rural areas, especially those in your geographic area?

There are shortages in math, science, foreign language, and bilingual/ESL teachers in rural areas. Does your institution make specific efforts to attract teachers in those areas, and if so, whom could I talk to about that?

3. Who would be the appropriate respondent concerning information you maintain to track where graduates are teaching? (Ask about documents, data, and so on).

Finally, there are other strategies that may be used to help fill the need for qualified teachers in rural areas. Does your institution participate in any of the following, and if so, who might be able to tell me about them—or send documents.

Probe for:

- Distance-learning, online education.
  - Partnerships with local school districts.
  - Partnerships with community colleges.
  - Programs to help teachers become certified in multiple content areas.
4. Is there anything that I have not covered that is a particularly important part of your teacher education program that helps to prepare teachers to teach in rural areas? If so, what is it, and who can tell me more about it?

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**NOTES**

1. Johnson and Strange (2005) reanalyzed data from the National Center for Education Statistics and the U.S. Census Bureau. This reanalysis was used to obtain state data for the Central Region.
2. Considering the variety of sources for the data in this report, *rural* in each case is defined by the source, and it might not be consistently defined even within a source, let alone across sources. One way the NCLB Act of 2001 suggests that districts are rural is whether they “lack the personnel and resources needed to compete effectively for federal competitive grants.” The National Center for Education Statistics assigns a locale code by number of students in the district; defined as rural are codes 7 (rural, outside metropolitan statistical area) and 8 (rural, inside metropolitan statistical area).
3. The data to select the 28 institutions were obtained from a review of institutional web sites, so an active program not found on an institution’s web site could have been missed.
4. To better understand different rural settings, revisions have been made to the locale definitions used by the U.S. Census Bureau, noting that the size of a community alone is not enough to determine whether it is rural. Proximity to urban areas affects the rurality of a community as well.
5. While Barrow and Burchett had a less than robust response rate (58.3 percent) this is one of the few studies to provide this type of data. They surveyed Missouri science teachers in schools with an enrollment of less than 700 secondary students.
6. Barker and Beckner drew from Gardener and Edington (1982), Guenther and Weible (1983), Horn (1985), Meier and Edington (1983), Nachtigal (1982), Nelson (1983), and Sher (1977) to develop their instrument with the 10 areas.
7. The land grant university and the university in each state that prepares the greatest number of teacher graduates were also included, even if the web site did not clearly show a rural component.

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