

# Australian and International Journal of Rural Education

# Choosing a Rural Teaching Position: Recognizing the Importance of Relationships and Field Experiences

#### Tena M. Versland

Department of Education, Montana State University, Bozeman, MT, USA tena.versland@montana.edu

#### Sarah Schmitt-Wilson

Department of Education, Montana State University, Bozeman, MT, USA sarah.wilson14@montana.edu

#### Jayne Downey

Department of Education, Montana State University, Bozeman, MT, USA jdowney@montana.edu

#### **Abstract**

This study reports the findings from a survey of 201 recent teacher education graduates from a university in the north-western United States of America regarding the factors that influenced their decision to take a teaching position in a rural or urban community following graduation. Results indicate that an in-depth rural practicum experience, being close to family, and the size of school influenced new graduates' decisions. Other factors such as school culture and administrative support were also found to be important to new graduates' decision making. The article will also share insights that can help to inform state and local educational agencies about strategies in attracting new graduates and in retaining new teachers in rural schools.

**Keywords:** rural teacher decision making, rural field experiences

#### Introduction

Attracting and retaining effective teachers is a critical and persistent challenge faced by schools across the world. Studies have documented this challenge in the United States (Biddle & Azano, 2016; Monk, 2007); Uganda (Arinaitwe & Corbett, 2022); Australia (Downes & Roberts, 2018); Canada (Gereluk et al., 2020); Brazil (Schleicher, 2011); and Togo (Behrstock-Sherratt, 2016). In today's metrocentric society, extensive resources have been devoted to addressing the needs of urban schools. However, less attention (Barley & Brigham, 2008) has been paid to strengthening the preparation, recruitment, and retention of rural teachers. This is a serious oversight in light of the fact that almost one in six of the nation's students reside in rural communities (Showalter et al., 2017) and approximately 727,000 (19%) of our nation's teachers were employed in rural locales in 2018 (National Centre for Education Statistics, 2020). Findings have demonstrated how the rural staffing challenge is "complex and multifaceted, and conflated with a wide range of contextual variations in salaries, community amenities, geographic or professional distances, technology access,

health disparities, and poverty rates" (Azano et al., 2019, p.1). In this current era, it is critical for us to develop a respectful and nuanced understanding of the factors that shape pre-service teachers' understandings of rural teaching as well as the factors that prepare and attract them to live and work in rural communities.

In the United States, rural school staffing challenges have been heightened in recent years due to fewer people entering the teaching profession and more people leaving the profession. For example, studies indicate that the percentage of college students majoring in education declined from 21% in 1970 to less than 5% in 2015 (Digest of Education Statistics, 2017). Adding to the gravity of the situation, research also indicates that prior to COVID-19 pandemic, 44% of new teachers left the field within the first three to five years of teaching (Ingersoll et al., 2018). And now, as a consequence of the dire effects of the global pandemic, a recent study found that approximately one-quarter of the teachers surveyed were considering leaving the teaching profession by year's end (Kaufman & Diliberti, 2021).

Part of the complexity of rural school staffing has to do with the multiple ways in which rurality is defined. In many instances, the construct of 'rural' has been defined in terms of population density and geographic distance from urban areas. For example, the U.S. Census Bureau defines "rural" as "what is left" (Ratcliffe et al., 2016, p.1), and the Office of Management and Budget refers to regions in terms of population density and uses the labels of Metropolitan (n>50,000), Micropolitan (10,000>n< 50,000), or 'Neither' (Office of Management and Budget, 2015). The United States National Center for Education Statistics (NCES) defines rurality by distance from large metropolitan areas (National Center for Education Statistics, 2022.). The three categories include: 'fringe' which is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster; 'distant' which is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster, and 'remote' which is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster (National Center for Education Statistics, 2022). This system of labelling rural locales is markedly different from the Remoteness Structure classification system used in Australia. The Remoteness Structure divides the country into five classes of remoteness (major cities; inner regional; outer regional; remote; very remote) relative to calculated road distances to the nearest service centres of various population sizes (Australian Bureau of Statistics, 2018). However, rural residents and scholars have long argued that metrocentric labels such as 'other' or 'neither' may have harmful consequences, while metrics such as geography and population density are simply inadequate parameters to fully define what makes a place rural (Azano et al., 2019). Rather, across the United States, Australia, and countries around the world, rural communities and their schools define their rurality by drawing upon their "complex and dynamic cultures shaped by distinct social, economic, political, cultural, and historical relations" (Downey et al., 2021, p. 204).

It is within a socially constructed and locally defined context that rural school leaders find themselves working to attract, hire, and retain well-prepared teachers because the stakes are high; students who lack well-prepared teachers can experience serious negative effects in learning and overall achievement (Ronfeldt et al., 2013). Thus, in a world facing an increasing shortage of skilled teachers, it is critical for rural stakeholders to understand the factors which may influence new teachers' decisions to accept a rural teaching position.

Previous research has examined the impact of specific curricular elements of teacher preparation programs (Azano, et al. 2019) including "the designing and implementing of content and experiences, including field experiences, in teacher preparation that aim to prepare teachers for professional and

personal success in rural schools and communities" (Azano et al., 2019, p. 3). Other studies have examined how participation in rural field experiences impacts future choice to teach in a rural school (Sharplin, 2002) as well as how developing an understanding of "the strengths and assets of rural communities and cultures, while also confronting stereotypes and misconceptions about rural places [can help to] disrupt deficit ideologies about rurality" (Azano et al., 2019, p. 3).

Still others have explored pre-service teachers' personal reasons and motivations for choosing to teach in a rural school. For example, in Australia, the Independent Review of Regional, Rural and Remote Education (Halsey, 2018) investigated the persistent challenge of attracting and retaining teachers for schools located in regional, rural, and remote areas, and the consequent impact on the learning and educational outcomes of regional, rural and remote students, including aspirations and access issues. Other studies (e.g., Handal et al., 2018; Sharplin, 2002) identified several motivators for taking a rural teaching position including: job availability, staff collegiality, school and class size, previously living in the same or similar area, affordable housing, preference for rural lifestyles, family links, spouse's employment, sense of community spirit, connections with staff, students, and community, increased professional opportunities and variety of responsibilities and teaching experiences.

If rural areas are to succeed in attracting and retaining teachers, researchers must investigate not only why teachers choose rural schools, but how schools, universities, and state agencies can leverage that knowledge by creating programs, incentives, and recruitment strategies to attract and retain high quality rural educators.

### **Strategies Influencing Rural Teacher Recruitment**

Several strategies have attempted to recruit new teachers to rural places. These strategies have been met with varied levels of success depending on the context and the conditions surrounding the implementation of each strategy (Aragon & Wixom, 2016; Latterman & Steffes, 2017;). Some of the more common strategies include Grow Your Own programs, financial incentives for new teachers, and field experiences whereby teacher preparation programs intentionally place students in rural communities and schools. These and other strategies are explained below.

#### **Grow Your Own Programs**

There has also been considerable attention around Grow Your Own programs, and though definitions of Grow Your Own may encompass a few different elements, most contain the lynchpin of local teacher recruitment. Barley and Brigham (2008) argued that to ensure student teachers understand the cultural and social norms of rural places, preparation programs should recruit future teachers from rural areas. Some Grow Your Own programs focus their recruitment efforts on high school students; and using them in paraprofessional roles where they can experience teaching and working with children as a potential occupation (Greenberg et al., 2018). Other Grow Your Own programs seek to recruit adults within the community who have taken some college courses, or who have experience working as paraprofessionals, to enter a preparation program to gain full certification as a teacher. While there are nuances to Grow Your Own programs, the overarching goal is to recruit rural people to complete a teacher education program and seek employment in rural schools close to their hometowns.

Beesley et al. (2010) found that rural principals focused on three areas for recruitment: Grow Your Own programs, federal funding opportunities, and using targeted incentives. Federal funding was

often employed in conjunction with Grow Your Own programs to create options for multiple certifications, offering access to distance learning opportunities and courses in rural areas whereby rural teachers could add endorsements and become highly qualified. Principals in the study also discussed the importance of recruiting prospective teachers from the pool of residents already living in rural communities and the intentionality of "turning rural residents into teachers, rather than turning teachers into rural residents" (Beesley et al., 2010, p. 8). Finally, principals sought to entice teaching applicants with other incentives such as higher pay and grant opportunities, while also promoting benefits of teaching in rural areas such as small class sizes, fewer discipline problems, and living in a non-metro location.

### **Personal Choices and Rural Familiarity**

Rural teaching decisions are also influenced by teachers' familiarity with rural lifestyles. Handal et al. (2018) reported results from a study of 191 New South Wales rural teachers about their attitudes regarding their reasons for teaching in rural remote areas. They found that respondents reported that initial teaching decisions were based on obtaining a permanent teaching position and gaining work experience in rural schools, the desirability of living in rural settings, and the collegial culture rural schools enjoy. The study also looked at demographic variables of the respondents and found that growing up in rural areas and having family connections in those areas made it more likely that young teachers in the 18-30 age range, and especially females, would choose to pursue teaching positions in rural areas. Lyons et al. (2006) likewise agreed that availability of jobs, placement by educational authorities, and having previously lived in that or similar rural areas increased the likelihood that younger teachers would first choose rural schools. These researchers also found that younger teachers stayed longer in rural areas due to financial advantages, more so even than their older colleagues.

# **Family and School Factors**

Ulferts (2016) surveyed teachers in the smallest public school districts in Illinois asking about recruitment, retention, and job satisfaction factors. Ulfert's survey was based on a study by Boylan et al. (1993) and their findings of four pillars (Within Classroom Activities, Whole School-Level Activities, Community Level Activities, and Family Factors) that influenced recruitment and retention of rural teachers in Australia. Similar to Davis' (2002) study in Montana's rural districts, Ulfert found that recruitment of teachers, namely their reasons for selecting rural teaching positions, were best represented by factors that aligned with the spheres describing Family Factors and Whole School Level Activities such as: 'best or only job offer', 'enjoy the rural lifestyle', 'family and or home is close by', and 'small class size'. 'Relationships with students', 'safe environment', 'small class size', and 'support from administrator' emerged as factors with the highest mean scores influencing teachers to remain teaching in rural schools. These factors best aligned with Within Classroom and Community Level Activities spheres and were most critical to teacher retention.

# **Field Experiences**

Offering authentically rural field experiences in educator preparation programs may also hold promise for influencing new teachers' decisions about teaching in rural schools. Munsch and Boylan (2008) studied 14 preservice teachers participating in a week-long practice teaching experience in small village schools in rural Alaska. Researchers learned that a one-week program integrating course objectives from Multicultural Education and Alaska History classes into the practice of teaching in rural areas provided enough time to "start the change process for preservice teachers unaware of the opportunities and dilemmas facing those who teach in rural, remote locations" (Munsch & Boylan, 2008, p. 21). Cuervo and Acquaro (2018) conversely cautioned that simply providing placement

experiences in rural areas is not a guarantee to addressing issues with recruitment and retention. They also discussed the need for education preparation providers to include more rural education content in courses as a means to counteract a deficit narrative of rural living and rural schools. Finally, they encourage public policy makers to financially support rural school graduates to return to rural areas to teach as the best solution to the problem of rural recruitment and retention. White and Kline (2012) developed a framework to assist teacher educators to prepare graduates for working in rural schools and communities. Central to their framework is the need to equip new teachers with knowledge and experiences in rural teaching, rural living, the unique attributes of rural communities, and the role and responsibilities of rural teachers within the community itself. White and Kline state that "teachers educators need to focus more on developing graduates" to be not only classroom ready, but also "school and community ready" (White & Kline, 2012, p. 36).

# **Purpose and Research Questions**

This study was conducted with graduates who completed their degrees in 2017-2020 from a Montana university teacher preparation program. Montana, the fourth largest state (land mass) in the contiguous United States, is also  $48^{th}$  in population density, with 42 of 56 counties having less than five people/square mile. Additionally, small rural districts make up 96% of all public school districts in the state; "no state has a higher percentage of rural schools or small rural districts" (Showalter et al., 2017, p. 138). In 2017, 83% of Montana's teacher vacancies were in rural schools (Montana University System Rural Educator Recruitment and Retention Task Force, 2017).

In 2020, the teacher preparation program in this study served approximately 800 undergraduate students in a Pre-school-grade 8 elementary option as well as 13 secondary (licensed grades 5-12) teaching options including: English, Mathematics, Social Studies, Science, Agriculture, Biology, Chemistry, Family and Consumer Science, History, Physics, and Technology Education. Kindergarten to Year 12 programs in Art Education, Music Education, Modern Languages, and Health Enhancement are also included in the university's teacher preparation program. Finally, the program recently developed an initial licensure option for those possessing baccalaureate degrees in areas outside of education. This option currently serves 20-24 students.

In response to the challenges staffing rural schools, the teacher preparation program has developed several opportunities for students to expose them to rural educators, rural schools, and allow them to gain authentic, clinical practice teaching in rural settings. These experiences begin early in students' education coursework by having several rural teachers and administrators act as guest speakers highlighting the benefits of working in rural areas and answering questions about rural communities and schools. One of the first clinical practice opportunities available encourages sophomore and second year students to participate in an after-school technology club/ book club in one-room, K-8 schools located less than half an hour from campus. These sessions occur in two-hour sessions for five days/ semester. The technology club/ book club experience has also been offered at a small K-12 school 250 miles from campus in a home stay format where students stay in the rural community and work with various groups of K-12 students for approximately 10 hours over two separate days. Junior or third year students have the option of participating in an intensive weeklong rural practicum with K-12 rural districts 300-450 miles from campus. Twelve to fourteen students are chosen to travel as a cohort group to an area with a larger K-12 school (1000 students) or several smaller schools in proximity. Once there, they spend a week in intense planning and teaching and use nightly debrief sessions to reflect on instructional strategies, school culture, student engagement and rural community living (Versland et al., 2020). Senior or fourth year students may decide to participate in student teaching for 10-12 weeks in a rural school in the state. Rural student teachers

may apply for a rural student teaching scholarship which supports their living expenses while working in their rural community placement. Lastly, an employment event, The Rural Colloquium/ Teach Fair is held annually at the university to provide a forum for new graduates to meet employers and interview for rural teaching positions. The Rural Colloquium/ Teach Fair is also unique in that it provides teams of rural teachers and administrators to participate and lead roundtable discussions with junior and senior education students. Roundtable discussions centred on several different themes including living a rural lifestyle, the advantages of small schools and communities, information related to salary, benefits and teaching contracts, professional development and personal growth, and school culture and professional learning community.

In light of a significant need to "explore a broad range of factors that impact teacher decision-making that culminate in work destination decisions" (Handal et al., 2018, p. 5), the following research questions were developed to guide the data collection and analysis for this study:

- 1. Is there a relationship between pre-service teachers' rural program and field experiences and choosing a rural teaching position following graduation?
- 2. Is there a difference in reasons for selecting a position among graduates choosing to work in urban and rural communities following graduation?
- 3. What factors predict teaching in rural schools?

#### Method

This study developed an online survey to gather participants' perspectives on factors that influenced their choice of teaching position post-graduation (available on request). The qualitative section of open-ended questions allowed for greater insights into participant experiences. Participants were graduates of our teacher education program from 2017-2020.

We explored whether there were significant differences between exploratory variables (rural field experiences and reasons for selecting a position) and locale of participants' current teaching position (rural or non-rural). Acknowledging that there are numerous ways to define rurality, we defined rural communities as those consisting of 10,000 people or less that were not adjacent (defined as 15 miles or less) to metropolitan communities. Results indicated that 48% of participants were employed in rural schools and 52% were employed in non-rural schools. The main explanatory variables in this study were participation in rural field experiences and reasons for selecting a position. Participants were asked to indicate all factors that influenced their decision to accept a specific teaching position. We used a chi-square analysis, a series of t-tests, and a logistic regression to explore the data.

#### **Data and Sample**

This study used a sample consisting of graduates from the teacher education program over the past three and a half years. To recruit participants, 479 emails were sent to graduates from 2017, 2018, 2019, and the spring of 2020. Two hundred and one participants responded for a 42% response rate. Participants received a \$20 gift card in appreciation for their participation.

#### **Outcome Variable**

We examined whether there were significant differences between exploratory variables (rural field experiences and reasons for selecting jobs) and whether participants taught in rural schools. To code for rurality, researchers independently coded each town named in the open-ended responses. Codes were compared, and areas of disagreement were resolved. This variable was dichotomously coded (o did not teach in a rural school and 1 did teach in a rural school). In the sample 48% of participants were employed in rural schools whereas 52% were employed in non-rural schools.

#### **Explanatory Variables**

The main explanatory variables in this study were rural program and field experiences and reasons for selecting jobs. As referenced above, the teacher preparation program includes several program experiences and field experience partnerships between the program and rural school districts of varying size and configuration. Field experiences were coded dichotomously (1= participated in field experience and 0 did not participate in field experience).

Participants were given several reasons for selecting jobs (student teaching experience in the district, access to affordable or school subsidized housing, school class size, spouse/partner employment opportunities, salary/benefits, relocation assistance, welcome of school community, quality of professional development/earning opportunities offered, community amenities, outdoor recreation opportunities, social opportunities in the community, location-close to family, and location-close to university. Participants were asked to indicate all factors that influenced their decisions to take a job. Responses for each category were coded dichotomously coded dichotomously (1= and o did not participate in field experience).

#### **Control Variables**

Control variables for this study included gender, race/ethnicity, teaching major, whether the participant had children, participant age, whether the participants were from in or out of state, hometown rurality, and whether participants student taught in a rural community. These variables were chosen by the researchers based on the study site's context. Participants' gender included three categories male (23%), female (76%), and non-binary (1%). While most of the participants were White (94%), 1% was Native American, 1% was Native Hawaiian, 1% was Asian, 1% was Latino, and 2% were two or more ethnicities. Among participants 52% were elementary majors, 37% were secondary majors, 10% were K-12 teachers (art, health enhancement, languages, and music), and 2% were early childhood majors. Ten percent of the participants had children, whereas 90% did not. Among participants, 69% were from communities within the state with 31% from communities outside of the state. The average age among participants was 24.61 (SE=.24). Fifty seven percent of participants were from urban communities, 12% were from suburban communities, and 31% were from rural communities. Finally, 65% of participants completed their student teaching in an urban community/school/district with 35% of participants student teaching in a rural community (see Table 1).

Table 1: Descriptive Statistics for all Respondents

	Frequency/Mean	Standard Erro
Control Variables		
Gender		
Male	0.23	0.04
Female	0.76	0.04
Non-binary	0.01	0.01
Ethnicity		
White	0.94	0.02
American Indian	0.01	0.01
Native Hawaiian	0.01	0.01

	Frequency/Mean	Standard Erro
Asian	0.01	0.01
Latino	0.01	0.01
Two or more races	0.02	0.01
Major		
Elementary	0.52	0.04
Secondary	0.37	0.04
K-12	0.10	0.03
Early Childhood	0.02	0.01
Has children?		
Yes	0.10	0.03
No	0.90	0.03
In vs. Out of State		
In-State	0.69	0.04
Out of State	0.31	0.04
Age	24.61	0.24
Hometown Rurality		
Non-rural	0.69	0.04
Rural	0.31	0.04
Student Teach Rurality		
Non-rural	0.65	0.04
Rural	0.35	0.04
Explanatory Variables		
Rural Field Experiences		
EDU Tech Club	0.12	0.03
Rural Practicum	0.10	0.03
Rural Colloquium and Teach Fair	0.29	0.04
Guest Speakers in Practicum Courses	0.37	0.04
Rural Student Teaching Scholarship	0.13	0.03
Total Rural Field Experiences		
o Experience	0.32	0.04
1 Experience	0.43	0.04
2 Experiences	0.19	0.04
3 Experiences	0.06	0.02
4 Experiences	0.01	0.01
Reasons for Selecting Jobs		
Student teaching experience in this district	0.34	0.03

	Frequency/Mean	Standard Erro
Access to affordable or school subsidized housing	0.23	0.03
School or class size	0.38	0.03
Spouse/partner employment opportunities	0.34	0.03
Salary/benefits	0.41	0.03
Relocation assistance	0.03	0.01
Welcome of school and community	0.44	0.04
Quality of professional development/learning communities offered	0.28	0.03
Community amenities (restaurants, shopping, healthcare)	0.29	0.03
Outdoor recreation opportunities	0.31	0.03
Social opportunities in community (i.e., there people my age in the community)	0.26	0.03
Location – close to family	0.41	0.03
Location – close to university town or similar size city	0.23	0.03
ependent Variable		
eaching in a Rural School District		
Non-rural	0.52	0.04
Rural	0.48	0.04

#### **Analysis**

We used a chi-square analysis to determine if there were differences between rural field experiences and teaching in urban or rural schools. A chi-square analysis is appropriate because the independent (field experience participation) and dependent (teaching in rural or urban school) variables are categorical (Gravetter & Wallnau, 2016).

A series of t-tests were conducted to determine if students teaching in urban/rural schools consider the job search criteria to be important in their decision making. The explanatory variable (teaching in rural or urban school) is categorical, and the dependent variable is continuous (Gravetter & Wallnau, 2016). We conducted a Levene's test statistic for equality of variances prior to running the t-tests Leech et al., 2014). Of the thirteen t-tests conducted, the equal variance assumption was violated for (seven tests. For tests where the equal variance assumption was violated, we reported the results of the 'equal variances not assumed' t-test (Satterthwaite, 1946).

A logistic regression was conducted to explore factors that predicted teaching in a rural school. We included background characteristics (gender, ethnicity, major, whether participants had children, age, rurality of hometown, and rurality of student teaching experience). In addition to background characteristics, we incorporated exploratory factors that were significant to marginally significant in previous analyses. The definition of marginal significance (.10 or less) was based on the work of Pritschet et al. (2016). We also included exploratory factors that were marginally significant in the chi-square and t-test analyses.

Our final survey question (open-ended) asked respondents to tell us anything else that they wanted us to know about the decisions they made in choosing their first teaching position. Eighty-nine

respondents included at least one comment. Those comments were analysed through an open coding process followed by axial coding to determine relationships between open-ended comments and other survey variables. Axial coding then revealed two overarching themes: program quality and job-decisions.

# **Findings**

#### **Rural Field Experiences**

Among participants, 12% participated in the rural technology club, 10% participated in a rural practicum experience, 37% had guest speakers in their practicum courses, 29% participated in the rural colloquium/ career fair, and 13% were awarded the rural student teaching scholarship. When exploring the relationship between these program experiences and the likelihood of teaching in a rural vs. non-rural district, having guest speakers in practicum courses was significantly related to teaching in non-rural vs. rural schools  $X^2(1, N = 126) = 4.786 p = .029$  with 45% of the students teaching in non-rural schools indicating that they had guest speakers in their practicum courses compared to 27% of participants teaching in rural schools (Table 2).

Table 2: Rural Field Experiences and Working in Urban vs. Rural Schools

	Frequency Urban	Frequency Rural	Model
EDU Tech Club	0.14	0.10	X <sup>2</sup> (1, N = 126) = .396, p =.529
Rural Practicum	0.06	0.15	X <sup>2</sup> (1, N = 126) = 2.714, p = .099
Rural Colloquium and Teach Fair	0.27	0.32	X <sup>2</sup> (1, N = 126) = .293, p = .589
Guest Speakers in Practicum Courses	0.45	0.27	X <sup>2</sup> (1, N = 126) = 4.786 p = .029
Rural Student Teaching Scholarship	0.12	0.15	$X^{2}(1, N = 125) = .223, p = .637$
Total Rural Field Experiences			X <sup>2</sup> (4, N = 126) = 1.602, p = .809
o Experience	0.30	0.33	
1 Experience	0.42	0.43	
2 Experiences	0.21	0.17	
3 Experiences	0.06	0.05	
4 Experiences	0.00	0.02	

To illustrate, there was a marginally significant relationship between rural practicum experience and teaching in a rural district  $X^2(1, N = 126) = 2.714$ , p = .099 with 15% of students who completed a rural practicum experience teaching in rural school compared to 6% of students who completed a rural practicum teaching in a non-rural school. Additionally, there were open-ended comments crediting the rural practicum experience with their decisions to teach in rural schools. Participant #22 stated "I was happy with my choice that the rural practicum introduced me to, and where I student taught. I then stayed on and taught at the same school for 2 more years". Participant #61 said "When I was looking for positions, I was more open to teaching in Eastern Montana after my rural practicum experience in Northeast Montana". There were no other significant differences in percentage of students completing the rural field experience and working in a rural vs. non-rural schools.

#### **Reasons for Selecting a Position**

For all respondents, when asked to indicate factors which have influenced their decisions about accepting a teaching position, overall, participants indicated that the welcome of the school and community (44%), location close to family (41%), salary/ benefits (41%), school or class size (38%) were the most important factors in their selection of a position. In contrast, relocation assistance (3%), location close to university community or similar size community (23%), access to affordable or school subsidized housing (23%), and social opportunities within the community (26%) were less important factors (see Table 1 above).

Interestingly, among those respondents who chose rural school teaching positions (N=60) the most important factors in their decisions were school or class size (50%), the welcome of school and community (48%), salary/ benefits (45%), and being close to family (35%) (see Table 3). Ten qualitative, open-ended comments reinforced these findings. Participant # 122 stated "I coached in this little community for eight years, people knew me, and I felt I had the support of people". Participant #112 offered "I substitute taught in a larger school for almost a year but decided to return home and take a position near my family". Participant #69 said "I wanted to be close to my family to help them. I also wanted to live near the mountains… rural pay is less, but the trade-offs are worth it".

Table 3: T-Tests Comparing Reasons for Selecting Jobs

	Non-Rural		Rural		Significance
	Frequency	Standard Error	Frequency	Standard Error	
Student teaching experience in this district	0.42	0.06	0.17	0.05	t(120.05)=3.295, p=.0013
Access to affordable or school subsidized housing	0.24	0.05	0.23	0.06	t(124)=.119, p=.9057
School or class size	0.33	0.06	0.50	0.07	t(121.07)=-1.905, p=.0592
Spouse/partner employment opportunities	0.42	0.06	0.30	0.06	t(123.94)=1.452, p=.1489
Salary/benefits	0.44	0.06	0.45	0.06	t(124)=1187, p=.9057
Relocation assistance	0.05	0.03	0.00	0	t(65)=1.759, p=.0832
Welcome of school and community	0.53	0.06	0.48	0.07	t(124)=.523, p=.6019
Quality of professional development/learning communities offered	0.32	0.06	0.25	0.06	t(124)=.842, p=.4015
Community amenities (restaurants, shopping, healthcare)	0.35	0.06	0.25	0.06	t(124)=1.206, p.=.2302
Outdoor recreation opportunities	0.3	0.06	0.30	0.06	t(124)=.037, p=.9708
Social opportunities in community (i.e., there people my age in the community)	0.29	0.06	0.20	0.05	t(123.91)=1.474, p=.2534
Location – close to family	0.44	0.06	0.35	0.06	t(124)=1.02, p=.310
Location – close to University town or similar size city	0.29	0.06	0.12	0.04	t(117.30)=2.446, p=.0159

Factors such as location close to university town (12%), student teaching experience in the district (17%), and social opportunities within the community (20%) were of lesser importance. Conversely,

participants who chose to teach in non-rural schools were significantly more likely to indicate that student teaching experience in the district t(120.05)=3.295, p=.0013, and living close to the university town or similar size city t(117.30)=2.446, p=.0159 were important factors in their position decision.

# **Predictors of Teaching in Rural Schools**

To explore factors related to teaching in a rural school, we conducted a logistic regression analysis. The overall model was significant  $c^2$  (14, N = 117) = 48.25, p<.001. Among predictors, individuals who have children are more than seven times (733%) more likely (OR = 0.12, [{1.00/0.12 = 8.33} - 1.00] × 100%) and participants who grew up in a rural community are almost five times (484%) (OR= [5.84-1.00 × 100%]) to teach in a rural school than non-rural schools. Further, individuals who completed a rural practicum experience were almost six times (598%) (OR= [6.98-1.00 × 100%]) more likely to teach in a rural school than non-rural schools. Finally, individuals who looked for positions based on school or class size were over two times (216%) (OR= [3.16-1.00 × 100%]) more likely to teach in a rural school (see Table 4).

**Table 4: Odds Ratios Predicting Teaching in Rural Communities** 

	Odds Ratio	Significance
Gender		
Female	1.17	
Ethnicity		
Two or more races	11.50	
Major		
Secondary	0.86	
K-12	0.77	
Kids		
No	0.12	*
In vs. Out of State		
In-State	1.02	
Age	1.13	
Hometown Rurality		
Rural	5.84	**
Student Teach Rurality		
Rural	1.83	
Rural Practicum	6.98	**
Guest Speakers in Practicum Courses	0.35	
Student teaching experience in this district	0.30	*
School or class size	3.16	*
Location – close to University town or similar size city	0.74	
Log Likelihood	-56.97	
Pseudo R	0.30	
N	117	

Notes. The reference groups are 'Male', 'White', 'Elementary education majors', 'Having children', 'Out of state' and 'Non-rural'.

# **Findings from Open-Ended Comments**

We included one (open-ended) survey question which gave respondents a chance to expand their thoughts about the decisions they made in choosing their first teaching position. Eighty-nine respondents included at least one comment. From those comments two main themes emerged: *Program Quality* and *Job Decisions*.

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001

Program Quality. The program quality theme included comments that both praised and offered constructive feedback about various aspects of the teacher education program. Participants #22 and #61 singled out their rural practicum opportunities for exposing them to the benefits of teaching in rural schools. Participant #22 stated "I'm happy that I went from practicum to student teaching to a job – all in the same school!" Participant #61 said "I was much more open to teaching in Eastern Montana after being in rural practicum". Others praised the university's Rural Colloquium/Teach Fair for helping them secure employment. Participant #99 said "I met my employer at the Teach Fair when I was a junior and we continued to visit until I was hired the next year". Participant #23 said "Keep the Colloquium and Job Fair – that's how I was hired!". Constructive feedback mostly centred on the need for greater student teaching options in rural places and more supportive structures if placements broke down. Participant #92 stated "I student taught in another state and had some difficulty with a mentor teacher. The university didn't offer much support during that time".

**Job Decisions.** The other emergent theme, *job-decisions*, entailed three sub themes: financial concerns, relationships, administrative presence and collaborative culture. Most comments (70) made up these sub-themes. Within the financial concerns sub-theme, seven respondents said that they would not be seeking teaching positions in rural areas because of low salary and benefits, and lack of employment opportunities for spouses. Participant #160 said "Low salary and inadequate benefits pushed me out of teaching in rural areas". Participant #58 indicated "I would like to be rural, but my husband is a physical therapist, and we need to move to a bigger city for his work".

The relationship sub-theme garnered 15 positive responses about why respondents chose to teach in rural settings. Eight said that teaching in a rural school enabled them to be close to family or the town where they grew up. Participant #165 stated:

I student taught here. My family is close, I fell in love with the school and the grade I taught and can't imagine myself anywhere else! It is a small and wonderful school with close relationships with staff, families, and students. I love it!

Others stated that they appreciated the chance to teach in smaller places where they could build deeper relationships with students and families. "I never expected to teach in rural Montana, but I'm loving it! The staff and community have been so supportive – it feels like home" (Participant # 54). Finally, Participant #74's comments illustrate the relationship theme with a desire to give back to the community.

I grew up in this school and the amount of love and support I received from the community was overwhelming and a key part to why I am successful as an adult. I want to be a part of that and give back directly to my students and this community for all they have given to me.

The third sub-theme, administrative presence and collaborative culture, accounted for the comments of 13 respondents. Ten of those people indicated that their school's administrator figured prominently in their decision to teach there. Participant #97 said "ongoing communication with the principal had a huge impact on my decision". Another participant (#168) stated "I chose the school where I felt the most welcomed by the administrator and other teachers". "Leadership was a huge factor in me accepting this job", participant #137 commented. Other respondents indicated that their school had a reputation for collaborative and creative teachers, and that collegiality would present them with the support to grow professionally. "The quality of the teaching community was important to me", (Participant #113). "My decision was based on the collaborative opportunities at my school, they were most helpful to a new teacher", said Participant #140.

#### Discussion

Although this research examined the contribution that rural field experiences might have on candidate decisions to teach in rural settings, both quantitative and qualitative themes echo the findings of Boylan et al. (1993) about why teachers choose to remain teaching in rural areas. Quantitative results from the current study indicate that for new teachers, decisions to take a rural teaching job are dependent on school or class size (50%), the welcome of school and community (48%), salary/ benefits (45%), and being close to family (35%). Participant #165 (comment reported above) illustrates three of the four top reasons for selecting a position in a rural school.

These results reinforce Boylan et al.'s (1993) findings that teachers choose rural teaching settings because of the promise of smaller school and class sizes that promote deeper relationships with students and teaching colleagues. Boylan et al. described this rationale as Sphere #1, 'Within Classroom Activities'. In our study, new teachers also identified salary/ benefits and welcome of the community as reasons they chose to teach in rural settings. These reasons coincide with Sphere #4, 'Family Factors', which describe teachers' desire to live a rural lifestyle embodied by community stability, personal health and well-being, and the possibility of raising a family in a safe, family-oriented environment.

The qualitative results also reinforce that the sub-theme of *relationships* parallels Boylan et al. 's Spheres 1 and 4. Fifteen open-ended comments from study participants revealed that new teachers sought to live and work in rural areas to develop close relationships with their students and others in the community, but also chose rural settings to be close to extended family members who lived nearby. Participant #74 discussed the impact that the welcoming nature of their community had on their career goals (see quote above).

While Sphere #2, 'Whole School Level' was more associated with teachers' work dissatisfaction in Boylan et al.'s research (1993), in the current study, 13 new teachers said that positive administrative presence and collegial culture during the recruitment and hiring process influenced their decisions to choose their current rural school. However, *financial concerns*, another qualitative sub-theme, was negatively associated with participants choosing rural schools mostly due to low salary and lack of employment opportunities for spouse or partners. Boylan et al. described how these concerns were also a part of the Australian teachers' reasons for leaving rural areas as explained in their framework's Sphere #4, 'Family Factors'.

From our research, we know that some rural field experiences may have a greater influence than others in the prediction of a candidate choosing to teach in rural settings. There were no significant differences in the likelihood of teaching in a rural vs. urban school among individuals who participated in the rural technology club, who were rural student teaching scholarship recipients, nor who participated in the rural colloquium and teach fair. Having guest speakers in class was negatively associated with choosing to teach in a rural school. Although this would appear to be a nonconfirmatory factor for the influence of rural guest speakers on candidates choosing teaching positions in rural schools, it is best explained by the fact that rural practicum students would not have been exposed to guest speakers advocating rural teaching opportunities. Guest speakers spoke only to sections of students who did not have rural field or practicum experience. The guest speaker variable represented the minimum level of information about rural school teaching; whereas students who participated in rural field or practicum experience engaged in learning opportunities above and beyond what they could have learned from a guest speaker.

In our study, only the rural practicum experience was predictive of an increased likelihood of teaching in a rural community. The fact that the rural practicum experience was organised in a cohort

model where 12-15 participants engaged in practice teaching in the same or nearby rural schools, allowed for nightly debrief of their full day experiences. These debrief and reflection sessions created the conditions for participants to actively develop a quasi-professional learning community, as they shared insights about students, curricular needs, and helped one another develop lessons and materials to be used the following day in their teaching practice (Versland et al., 2020). This quasi-professional learning community may have given participants a glimpse of what they hope to experience with future colleagues in rural schools. Qualitative comments also provide evidence that an intense week-long, rural practicum experience may offer university participants the chance to experience collaborative school culture, build relationships within the school community, and meaningfully interact with the school administrators and teacher colleagues. These results are not surprising and are reinforced by data from the sub-themes of relationships, and administrative presence and collaborative culture.

In summary, this research supports the idea that not all rural field experiences are created equal. Rather than simply trying to increase the number of rural field experiences, teacher education programs should focus on providing in-depth rural field experience opportunities which along with personal, community, and school factors promote teaching in rural schools.

### **Implications for Practice**

From our findings, it was clear that participants who chose rural teaching positions were influenced by the following factors: school or class size that enabled relationship development, a competitive salary and benefit package, and a collaborative school culture and supportive relationships within the larger community. Thirteen participants identified their interactions with an administrator and collaborative team/ hiring committee as having a very positive impact on their job-decision. This seems to signal a candidate preference for a hiring process that includes multiple meaningful interactions between the candidate and the school administrator as well as extended opportunities for the candidates to meet potential teaching colleagues. School districts may benefit from a recruitment strategy that emphasizes multiple interactions with candidates by a recruitment team consisting of the school administrator/ principal, teacher colleagues, and possibly community mentors.

Additionally, and as prior researchers (Aragon & Wixom, 2016; Latterman & Steffes, 2017; Showalter et al., 2017) confirmed, a competitive salary and benefits package is wholly necessary to recruit new teachers to rural schools. Rural school administrators and community members must work collaboratively to influence the legislative/ financial processes that fund rural schools and support rural education. Additional policy changes that may bolster rural recruitment may include expanded loan forgiveness, stipends for teaching in remote and/ or underserved areas such as on Indian reservations, and scholarships for rural high school students to become teachers and return to their rural communities. Funding for these kinds of incentives would require state level adjustments to the overall funding structures at the legislative division.

The blend of quantitative and qualitative data suggesting that rural teaching candidates desired to be close to family presents a unique opportunity for rural school districts and university teacher preparation programs to partner in recruiting and incentivizing local high school graduates to earn teaching degrees that would provide a means to return to rural communities with a job-ready skill set.

#### Limitations of the Study and Further Research

This study has several limitations. First of all, the study only looked at graduates of one program within a three-year time period immediately after they graduated college. The study only explored what caused new graduates to take their first positions in rural schools; we did not ask participants how long they intended to stay in their teaching positions (both rural and non-rural). Therefore, we do not have data regarding persistence in rural teaching. Further research that looks at persistence in rural teaching among this cohort of participants would be beneficial. We acknowledge that in a world where there are multiple definitions of rurality, we chose the definition that appeared to best fit within the context of our state and where most of our graduates took positions.

One unexpected finding was the influence that school administrator interactions had on new teacher job-decisions. We know that principals can have a positive impact on the self-efficacy of teachers (Lambersky, 2016) as well as on the collective efficacy of a school (Versland et al., 2017), but there is little research on how administrators factor into retention and job-decisions of novice rural teachers. Future research, therefore, could examine the influence that novice teacher relationships and interactions with building administrators have on three-to-five year job retention rates, and novice teacher\_decisions to stay in their initial rural teaching positions.

#### Conclusion

In this study, an intensive, week-long, rural practicum did have an impact on the job-decisions of candidates choosing positions in rural settings. Other influences included: salary and benefit package, welcome of the community, the ability to work in a small community close to family, and the overall sense of a positive school culture. This research makes an argument for teacher education programs to partner with rural school districts in designing and delivering meaningful clinical field experience such as a week-long intensive practicum experience that exposes teacher candidates to the benefits of living and working in rural communities.

#### References

- Aragon, S., & Wixom, M. (2016, June 8). Recruiting teachers to rural areas. Education Commission of the States. <a href="https://www.ecs.org/strategies-for-recruiting-teachers-to-rural-areas/">https://www.ecs.org/strategies-for-recruiting-teachers-to-rural-areas/</a>
- Arinaitwe, G., & Corbett, M. (2022). Rural Teacher Shortages and Home-grown Solutions: A Ugandan Case Study. Australian and International Journal of Rural Education, 32(1), 18–32. https://doi.org/10.47381/aijre.v32i1.320
- Australian Bureau of Statistics (2018, 15 March 2018). Remoteness Structure. http://www.abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure
- Azano, A., Downey, J., & Brenner, D. (2019). Preparing preservice teachers for rural schools. Oxford University Press. https://doi.org/10.1093/acrefore/9780190264093.013.274
- Barley, Z. & Brigham, N. (2008). Preparing teachers to teach in rural schools. REL 2008-No. 045. https://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL\_2008045.pdf
- Beesley, A. D., Atwill, K., Blair, P., & Barley, Z. A. (2010). Strategies for Recruitment and Retention of Secondary Teachers in Central U.S. Rural Schools. *The Rural Educator*, 31(2). <a href="https://doi.org/10.35608/ruraled.v31i2.937">https://doi.org/10.35608/ruraled.v31i2.937</a>

- Behrstock-Sherratt, E. (2016). Creating coherence in the teacher shortage debate: What policy leaders should know and do. Education Policy Center at American Institutes for Research.
- Biddle, C., & Azano, A. P. (2016). Constructing and reconstructing the "rural school problem": A century of rurality and rural education research. Review of Research in Education, 40, 298–325. https://doi.org/10.3102/0091732X16667700
- Boylan, C., Sinclair, R., Smith, I., Squires, D., Edwards, J., Jacob, A., O'Malley, D., & Nolan, B. (1993).

  Retaining teachers in rural schools: Satisfaction, commitment and lifestyles. In, C. Boylan & M. Alston (Eds.), Rural Education Issues: An Australian Perspective. Wagga Wagga, NSW: SPERA.
- Cuervo, H., & Acquaro, D. (2018). Exploring metropolitan university pre-service teacher motivations and barriers to teaching in rural schools. Asia-Pacific Journal of Teacher Education, 46:4, 384-398. https://doi.org/10.1080/1359866X.2018.1438586
- Davis, M. (2002). An investigation of factors related to teacher retention in small rural school districts in Montana (Unpublished doctoral dissertation). Montana State University, Bozeman, Montana. <a href="https://scholarworks.montana.edu/xmlui/bitstream/handle/1/8187/31762103589360.pdf?sequence=1&isAllowed=y">https://scholarworks.montana.edu/xmlui/bitstream/handle/1/8187/31762103589360.pdf?sequence=1&isAllowed=y</a>
- Downes, N., & Roberts, P. (2018). Revisiting the schoolhouse: A literature review on staffing rural, remote and isolated schools in Australia 2004–2016. Australian and International Journal of Rural Education, 28(1), 1–24.
- Downey, J., Elliot, A., Koltz, R., & Murray, K. (2021). Rural school-based mental health: Models of prevention, intervention, and preparation. In A.P. Azano, K. Eppley, & C. Biddle (Eds.) Bloomsbury Handbook of Rural Education in the USA (121-132). Bloomsbury Academic
- Gereluk, D., Dressler, R., Eaton, S. & Becker, S. (2020). Growing our own teachers: Rural individuals becoming certified teachers. In M. Corbett & D. Gereluk (Eds.) Rural teacher education: Connecting land and people (131-138). Springer
- Gravetter, F.J. & Wallnau, L.B. (2017). Statistics for the behavioral sciences (10<sup>th</sup> ed.). Belmont, CA: Cengage.
- Greenberg Motamedi, J., Leong, M., & Yoon, S.Y. (2017). Strategies for Designing, Implementing, and Evaluating Grow-Your-Own Teacher Programs for Educators. REL Northwest. <a href="https://ies.ed.gov/ncee/edlabs/regions/northwest/pdf/strategies-for-educators.pdf">https://ies.ed.gov/ncee/edlabs/regions/northwest/pdf/strategies-for-educators.pdf</a>
- Halsey, J. (2018). Independent review into regional, rural and remote education—Final report.

  Department of Education and Training. <a href="https://icpa.com.au/sites/icpa.com.au/files/inline-files/irrre-final-report.pdf">https://icpa.com.au/sites/icpa.com.au/files/inline-files/irrre-final-report.pdf</a>
- Handal, B., Watson, K., Petocz, P., and Maher, M. (2018). Choosing to teach in rural and remote schools: The zone of free movement. *Education Research and Perspectives*, 45, 1-32. https://www.erpjournal.net/wp-content/uploads/2020/02/01\_ERPV45\_Handal.pdf.pdf

- Hart, L. G., Larson, E. H., & Lishner, D. M. (2005). Rural definitions for health policy and research. *American Journal of Public Health*, 95(7), 1149-1155.
- Ingersoll, R. et al. (2018). Seven Trends: The Transformation of the Teaching Force Updated. CPRE Research Reports, <a href="https://repository.upenn.edu/cpre\_researchreports/108">https://repository.upenn.edu/cpre\_researchreports/108</a>
- Kaufman, J. & Diliberti, M. (2021). The teachers are not all right: How the COVID-19 pandemic is taking a toll on the nation's teachers. Center on Reinventing Public Education. https://www.crpe.org/sites/default/files/ep\_teachers\_synthesis.pdf
- Lambersky, J. (2016). Understanding the human side of leadership: Principals' impact on teachers' morale, self-efficacy, stress and commitment. *Leadership and Policy in Schools*, 15(4) 379-405. http://dx.doi.org/10.1080/15700763.2016.1181188
- Latterman, K., & Steffes, S. (2017). Tackling teacher and principal shortages in rural areas. *LegisBrief*, 25(40). http://www.ncsl.org/research/education/tackling-teacher-and-principal-shortages-in-rural-areas.aspx.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2014). IBM SPSS for intermediate statistics: Use and interpretation. Routledge.
- Lyons, T., Cooksey, R., Panizzon, D., Parnell, A., & Pegg, J. (2006). Science, ICT and mathematics education in rural and regional Australia: Report from the SiMERR National Survey.

  Department of Education, Science and Training.

  <a href="https://simerr.une.edu.au/pages/projects/1nationalsurvey/Abridged%20report/Abridged\_Full.pdf">https://simerr.une.edu.au/pages/projects/1nationalsurvey/Abridged%20report/Abridged\_Full.pdf</a>
- Monk, D. H. (2007). Recruiting and retaining high-quality teachers in rural areas. The Future of Children, 17(1), 155–174. DOI: 10.1353/foc.2007.0009
- Montana Office of Public Education. (2020). Understanding Montana school finance and school district budgets. Helena.
- Montana University System Rural Educator Recruitment and Retention Task Force. (2017). Preparing Montana's teachers: Presentation for interim committee. Helena, MT: Montana University System. <a href="https://www.mus.edu/index.html">https://www.mus.edu/index.html</a>
- Munsch, T. R., & Boylan, C. R. (2008). Can a Week Make a Difference? Changing Perceptions about Teaching and Living in Rural Alaska. *The Rural Educator*, 29(2). <a href="https://doi.org/10.35608/ruraled.v29i2.469">https://doi.org/10.35608/ruraled.v29i2.469</a>
- National Centre for Education Statistics (2017). Digest of Education Statistics. https://nces.ed.gov/programs/digest/d17/tables/dt17\_322.10.asp?current=yes
- National Centre for Education Statistics (2020). Digest of Education Statistics. https://nces.ed.gov/programs/digest/d20/tables/dt20\_209.21.asp?current=yes
- National Centre for Education Statistics (2022). Locale Definitions. https://nces.ed.gov/surveys/annualreports/topical-studies/locale/definitions

- Nugent, G. C., Kunz, G. M., Sheridan, S. M., Glover, T. A., & Knoche, L. L. (2017). Rural Education Research in the United States. Springer. https://doi.org/10.1007/978-3-319-42940-3
- Office of Management and Budget (2015). Defining rural populations. U.S. Department of Health and Human Services, Health Resources and Services Administration. https://www.hrsa.gov/ruralhealth/aboutus/definition.html
- Pritschet, L., Powell, D., & Horne, Z. (2016). Marginally significant effects as evidence for hypotheses: Changing attitudes over four decades. *Psychological Science*, 27(7), 1036-1042.
- Ratcliffe, M., Burd, C., Holder, K., & Fields, A. (2016). Defining Rural at the U.S. Census Bureau. ACSGEO-1, U.S. Census Bureau, Washington, DC. <a href="https://www.census.gov/content/dam/Census/library/publications/2016/acs/acsgeo-1.pdf">https://www.census.gov/content/dam/Census/library/publications/2016/acs/acsgeo-1.pdf</a>
- Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. American Educational Research Journal, 50(1), 4-36. http://aer.sagepub.com/content/50/1/4
- Satterthwaite, F. E. (1946). An approximate distribution of estimates of variance components. *Biometrics bulletin*, 2(6), 110-114.
- Schleicher, A. (2011). Building a high-quality teaching profession: Lessons from around the world. OECD Publishing. https://doi.org/10.1787/9789264113046-en
- Sharplin, E. (2002). Rural retreat or outback hell: Expectations of rural and remote teaching. *Issues in Educational Research*, 12, 49-63.
- Showalter, D., Klein, R., Johnson, J., & Hartman, S. L. (2017). Why rural matters 2015–2016: Understanding the changing landscape. Rural School and Community Trust. <a href="http://www.ruraledu.org/user\_uploads/file/WRM-2015-16.pdf">http://www.ruraledu.org/user\_uploads/file/WRM-2015-16.pdf</a>
- Theobald, P. (2009). Education now: How rethinking America's past can change its future. Paradigm Publishers.
- Ulferts, J. (2016). A brief summary of teacher recruitment and retention in the smallest Illinois rural schools, *The Rural Educator*, 37(1), 14-24.
- Versland, T., & Erickson, J. (2017). Leading by example: A case study of the influence of principal efficacy on collective efficacy. Cogent Education OA. http://dx.doi.org/10.1080/2331186X.2017.1286765
- Versland, T., Will, K., Lux, N., & Hicks, J. (2020). Envisioning the rural practicum: A means to positively affect recruitment and retention in rural schools. *Theory & Practice in Rural Education*, 10(1), 103–118. https://doi.org/10.3776/tpre.2020.v10n1p103-118
- White, S., & Kline, J. (2012). Developing a rural teacher education curriculum package. *The Rural Educator*, 33(2), 36-43. https://doi.org/10.35608/ruraled.v33i2.417