Rural Perspectives: How Rural School and District Leaders View the Present and Future of American Education

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Rural school and district leaders often have distinctive viewpoints about education, their local communities, and the effectiveness of their schools. Using a modified survey instrument, more than 100 rural school leaders from one Rocky Mountain State provided input on the critical issues impacting their schools and students and the future of public schools in the United States. A statistical review and the utilization of a Principal Component Analysis (PCA) found that most rural school and district leaders expressed their immediate concerns about budgetary shortfalls and a lack of educators to serve as teachers in their schools. In addition, many leaders see their schools as capable of working with students who perform above and below grade level. Recommendations for future research include an examination of how rural leaders support LGBTQ+ students, particularly those who are academically at or below grade level, and implementing new efforts to promote innovative solutions to persistent rural school challenges.

Keywords: rural education, leadership, diversity in rural schools, future of rural education

Rural schools in the United States are numerous and remain vital in their towns and villages. As rural schools remain the focal point of many rural communities, the school principals and superintendents are often seen as community leaders and individuals in control of a vital community resource. These leaders are frequently given a seemingly endless list of tasks and responsibilities when they accept the job, and the list gets longer the more they remain in their role. In addition to the endless undertakings to complete and perform, rural school principals and rural district superintendents are also

accountable to a variety of stakeholders, including school boards, parent groups, state education agencies, and alumni/ae who hold their time in school as a baseline for what comprises a "good school."

Most superintendents and principals in the American education system have their origins in the classroom as a teacher or some other entry-level role in public education. As a result, rural school leaders frequently have decades of experience in public education and have a unique perspective on the current state of education in the United States and what they see as the future of American schools and learning. This study sought to help identify and understand the perspective of rural public (governmental) school principals and public school district superintendents through survey research and quantitative data analysis to understand rural educators' concerns about the American education system, with a focus on the concerns and strengths as seen through their lived experiences.

This study sought perspectives from a wide range of rural school leaders in one Rocky Mountain state. Like all regions, the types of rural schools and communities throughout the state differ. Some are in agricultural-based communities, while others are in areas where tourism is the primary industry. The unifying characteristics of their roles and employment in non-urban or suburban schools, however, were used to create a data set that helped provide insight into the following research questions:

- How do rural public school district leaders in one Rocky Mountain state perceive the quality of and challenges to American public education today and in the future?
- To what extent, if any, do rural public school district leaders perceive the impact of national public education challenges on their local schools and school districts?

By examining their viewpoints and perspectives through a constructivist view, a greater understanding of the realities of contemporary rural education and areas of future concern can be identified. These rural school leaders are responsible for many operations, initiatives, accountability measures, and financial decisions in each school district. Their opinions, while seldom researched, are worthy of further investigation.

Literature Review

Rural areas enroll approximately 12 million students, representing 24% of the entire U.S. student population (NCES, 2016). These schools are in nearly every state, and there is a strong interconnection between education and economic outcomes in rural America. Recent scholarship has focused on trends in educational attainment, gender and racial disparities in rural schools, urban-rural comparisons, and the financial concerns related to rural education (Mare, 2017). While there are indications of increased educational attainment among rural Americans, this is not true for all demographic and sociological groups (Munyan-Penney & Mehrotra, 2023). For example, individuals living in remote rural regions are less likely to possess a four-year degree as compared to peers in urban and suburban areas (NCES, 2023). As seen in both urban and suburban schools, racial minority members and students from lower socioeconomic levels continue to report lower achievement than their white peers (Munyan-Penney & Mehrotra, 2023).

One of the unique components of research in rural education is the impact that local classifications play in understanding the context of rural schools. At the national level, there remains a locale classification system, which categorizes school districts into four major types: city, suburban, town, and rural. Additional subcategories have been developed depending on school size or proximity to urbanized areas (NCES, 2006). Based on these classifications, almost a quarter (24%) of all operating regular school districts in the United States are in rural areas (Cai, 2023). These include approximately 25,000 rural public elementary and secondary schools operating in nearly 6,000 districts (Gutierrez & Terrones, 2023). For this study, these federal guidelines are included. However, additional refinement regarding rural school districts in the state of this study was applied utilizing the state's definition of "rural" and "small rural" school districts.

In the United States, the role of the principal and superintendent has remained crucial during the last 100 years. Principals, in general, handle school-specific management and operations for students at one of three levels: elementary (ages 5-12), middle (ages 12-15), and high school (ages 15-18). Superintendents have a larger scope of responsibility as they are in charge of all schools within a geographic location (with exceptions for those leaders at online schools). Typically, superintendents are responsible for larger components of education, such as budgeting, facility and school

building updates, and larger community-based issues and concerns that involve the local schools. In smaller communities and schools, the role of principal and superintendent may be combined (colloquially termed "princitendent"). In the rural principal population in the United States, 86% of rural school leaders are white (Taie & Lewis, 2022). In the superintendent role for all American schools, 27% of these school district leaders are female, and 91% are white. There is little indication that these percentages differ substantially in rural locations. This lack of diversity in district leadership is highlighted in challenges faced by rural schools in America, as the number of diverse students between 1995 and 2004 increased by 55%, with more than 2 million rural school students who identify as non-white (Howley et al., 2014).

Additional recent scholarship on rural superintendents and principals has focused on reactions to external factors such as COVID-19 (Lochmiller, 2021), leadership practices (Hayes et al., 2021; Myende et al., 2018), drug abuse and addiction (Burfoot-Rochford, 2020), roles and responsibilities (Copeland, 2013), and employment and turnover (Kamrath, 2022; Williams et al., 2019; Lund & Karlberg-Granlund, 2023). Moreover, while these are important and relevant concepts related to rural education, they do illustrate the relatively limited study on the individual opinions of school and district leaders.

A survey research approach was employed to obtain the viewpoints of rural superintendents and principals on specific issues related to current and future outlooks of education. Survey research is appropriate for this study as it seeks to understand a targeted phenomenon and to "illuminate personality, social, and psychological attitudes" (Luhanga & Harbaugh, 2021, p. 1). The utilization of survey research in educational studies has been well-established and applied in a great deal of previous research (Alexander & Doddington, 2010; Wastiau et al., 2013; Patall, 2024; Liu & Ramsey, 2008) and provides unique insight into individual opinions in a uniform manner (Freeland, 2015). To obtain the viewpoints of leaders in many districts and schools, the application of survey research also provided an effective means of data collection.

Applied Theory

To help frame this study, a constructivist theory was applied to better understand rural school leaders' viewpoints and perspectives. Constructivism focuses on the belief that "some knowledge exists outside the mind" (Bingham et al., 2024, p. 6) and that meaning is constructed by the individual and through the developed relationship between the subject and the object. In this sense, linking the knowledge of the rural school experience to the subject of the present and outlook of American education constitutes the core of the constructivist approach for this study. The application of the constructivist approach has been used extensively in politics (Chandra, 2012), leadership (Leclerc et al., 2021), and education (Karpouza & Emvalotis, 2019). The benefits of leveraging this constructivism within survey research effectively correlate to obtaining participant viewpoints through an exploratory approach and allowing for the coding of responses to determine linkages between viewpoints and other categorical variables (Lindqvist & Forsberg, 2023).

While the constructivist approach does have merit and a long history of utilization, it does have limitations as well. The primary concern with the constructivist approach centers on the wide range of interpretation and perceptions held by individual respondents when examining constructs that may be difficult to specify or generalize across locations and experiences. While we can collect data from individual respondents, there must be some consideration that there is variability of perception built into the research model that cannot be fully overcome. Additional limitations can also include the impact of individual backgrounds and experiences, self-identity, and race/ethnicity as all these components can, and do, contribute to an individual's perception of their world and experiences.

The linkage between the constructivist theory and the application in this study, explicitly the connection to the survey design and data analysis, is founded within the perceptions and attitudes held by those responding to specific lines of inquiry. This is based on the concept that individual attitudes and opinions are based on other associations that impact the individual (Tourangeu et al, 2000), and there is a subsequent evaluation of this response. Hence, the alignment between the applied theory and

methodology was intentionally created and reviewed to ensure clarity in response and additional depth when analyzing these corrected responses.

Methodology

Instrument construction and validation were emphasized with the utilization of survey research in this project. After extensive review, it was found that there was an avenue to develop a concise, focused, and reliable survey using elements from three existing survey instruments (Educators for Excellence, 2023; Gallup, 2018; and University of Michigan, 2001). In each instance, specific lines of inquiry were isolated to ensure validity in terms of responses from our targeted population. For example, specific questions directly pertaining to school leadership were utilized from the 85-item survey developed by Educators for Excellence. To minimize and mitigate the challenges associated with the selection of individual questions within an existing instrument, extensive field testing was utilized with a small group of rural leaders to clarify vague or confusing questions. As a result of their feedback, the instrument was condensed in order to be completed in a short time frame. Leveraging the field test component served as a contributing factor in the establishment of instrument reliability, allowing the research team to review responses and non-responses among a sample of respondents throughout the field test.

It was also determined that the utilization of a principal component analysis (PCA) would be effective and appropriate for this study, as it is an effective method to reveal "hidden factors" within complex structures (Naik, 2019, p. v). PCA also has the advantage of preserving data variance within collected responses and reducing dimensionality without omitting essential and common responses (Gewers et al., 2022).

A distribution list for rural school superintendents and principals was developed through public-facing websites to obtain the email addresses of principals and superintendents employed in rural schools during the Fall 2023 semester. For those districts that did not display the e-mail addresses of these leaders, follow-up phone calls were made to obtain this information. In total, 252 individuals were identified and recruited to complete the survey and contacted via email. To encourage participation, survey completers were notified that they would be entered in a drawing to win university

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merchandise and the hand-delivery of donuts for all faculty and staff members at the winning school district. While these elements were not designed to influence individuals to complete the survey unduly, it must be noted that they may have been a factor in developed response rates.

Emails with the electronic survey link were distributed to all individuals who met the required criteria. The participation criteria included being a current superintendent or principal at a rural school in the designated state and having access to technology and computer networks where the electronic survey was to be completed. Contained within the survey instrument was an electronic form where consent to participate could be documented and an optional question where interested respondents could enter the incentive drawing. The response window for completed surveys was active for four weeks (28 days), and all survey data was collected following the end of the survey response period.

One hundred one surveys were completed, representing more than 50% of all rural school districts within the state. All collected data were reviewed to ensure survey completion and coded to reflect individual responses. Statistical analysis was completed to align with the primary lines of inquiry. Both descriptive findings and significant analysis are presented to provide greater insight into the responses provided.

Descriptive Findings

Following a four-week window, 101 responses were collected from individual respondents. After a screening of the data, eight submissions were redacted as responses were incomplete and were withdrawn from the data set. The following table (Table 1) provides details regarding respondents' characteristics.

Table 1Respondent Characteristics

Characteristic	Category	%	
Primary Role	Superintendent	64.5%	

	Principal	21.5%
	Superintendent & Principal	6.0%
	Other	8.0%
Years in Education	1–5 years	1.0%
	6-10 years	3.2%
	11–14 years	5.5%
	15+ years	90.3%
Geographic Location	Remote rural	63.9%
	Resort rural	12.2%
	Proximate rural	23.9%
	Other	0.0%
District Enrollment	1–150	16.3%
	151–500	38.0%
	501–1,000	21.7%
	1,000 or more	24.0%

Note. n = 92.

The focus on superintendents as the primary respondent population was intentional, as, in many rural schools, they are involved in all aspects of the school, including monitoring student learning, community relations, and hiring and retaining classroom teachers. Not surprisingly, most of these individuals have many years of experience in education, as more than 90% of respondents have been involved in education for 15 or more years.

For this study, the geographic location included personnel working in remote rural locations that are located more than 50 miles (80 kilometers) from an urban area, proximate rural locations that are located within 50 miles of an urban area, and resort rural schools that are in regions where the primary economic activities involve tourism and recreation.

Responses about immediate concerns facing rural school leaders were also collected and reviewed. Using a Likert scale, respondents were asked about potential

areas of concern for their school district as viewed by the school leader. This line of inquiry was purposefully developed to obtain an understanding of the immediate issues on which many school and district leaders focus. Table 2 highlights these responses.

Table 2Areas of Concern for Rural School Leaders

Area of Concern	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Improving th	e 1.0%	15.2%	6.5%	42.3%	35.0%
performance	of				
underprepared students					
Students living in povert	y 0.0%	10.8%	21.7%	40.2%	27.3%
Recruiting/retaining	1.0%	2.1%	4.3%	32.6%	60.0%
educators					
Strengthening academ	c 0.0%	13.0%	21.7%	39.1%	26.2%
rigor					
Preparing students for	or 0.0%	16.3%	18.5%	53.3%	11.9%
engaged citizenship					
Budget shortfalls	2.2%	9.8%	14.1%	40.2%	33.7%
State and federa	al 1.0%	10.9%	20.7%	40.2%	27.2%
assessment demands					

Note. n = 92.

As seen in Table 2, there are some variations regarding the specific areas of concern for rural educators. More than 90% of respondents noted that issues with recruiting and retaining educators were a primary concern, and 77% of those responding noted their concerns with supporting the academic performance of students who have been underprepared for success at their current grade level. Less than 12% of respondents noted that they were very concerned about preparing students for engaged citizenship, which may reflect the rural school's role in many small communities. As seen in many smaller communities and schools, it is not uncommon for students to be involved

in civic engagement with local government (Ludden, 2011). This may be reflected in this specific response.

Rural school and district leaders were also asked to provide input on their perceptions about the performance of their schools/districts on various topics. By examining their perception of effectiveness on various topics, it is possible to gain a deeper understanding of the perceptions of school strengths and development areas as developed by the responding school leaders. Lines of inquiry were developed to highlight specific groups and sub-groups of students, and the viewpoints on how effectively the school district meets the needs of these students were collected. These results are included in Table 3.

Table 3Rural School Districts' Effectiveness in Addressing Student Populations

Student	Does	Not at All	Not Very	Neutral	Effective	Very
Population	Not	Effective	Effective			Effective
	Apply					
Homeless	6.5%	0.0%	13.0%	26.1%	44.6%	9.8%
students						
Students below	0.0%	0.0%	20.7%	23.9%	48.9%	6.5%
grade level						
Non-native	12.0%	1.0%	26.1%	23.9%	34.8%	2.2%
English						
speakers						
Students above	1.0%	1.0%	16.3%	15.2%	52.2%	14.3%
grade level						
LGBTQ+	9.8%	2.2%	5.4%	44.6%	3.2%	0.0%
students						

Note. n = 92.

Based on these responses, very few leaders saw their schools and districts as completely ineffective for specific student groups. However, more than a quarter of respondents indicated that their district struggled with supporting non-native English speakers, and more than 20% indicated their concern about the effective support of students at or below a designated academic level. The focus on the perception of district support of LGBTQ+ students is also worthy of note, as more than 44% of respondents did not indicate that their district was either effective or ineffective in working with this student population. This finding is of interest as it contradicts existing scholarship that highlights the struggles and challenges many LGBTQ+ students face in rural schools (De Pedro et al., 2018; Shelton, 2022). Given this dichotomy, this line of inquiry will be expanded in a subsequent study.

Principal Components Analysis (PCA)

After reviewing and analyzing descriptive statistics, efforts were made to develop additional insight regarding responses and the interconnected nature of participants' viewpoints. To assist in this process, a principal components analysis (PCA) was performed to provide additional understanding of the linkage within responses. Using PCA to examine subsets of collected data, we examined and enhanced the understanding of the dimensionality of the collected data. This process allowed for greater ease of identifying patterns and commonalities in response – a desired outcome of this study. While the utilization of PCA is more common in larger datasets, it was advantageous in this case as it provided the opportunity to examine specific components related to participant response. With variability in respondent demographics and professional backgrounds, the use of PCA proved to be an effective avenue of analysis.

Quantitative Results

To assess the internal validity of each section of the online survey, Cronbach's Alpha tests were conducted on the responses to the questions related to each construct. The results of the Cronbach's Alpha tests are presented in Table 4.

Table 4Results of Cronbach's Alpha Tests for Each Construct

Latent Constructs	Cronbach's Alpha
Factor 1: College & Career Preparedness	.670
Factor 2: Challenges Preparing Students	.520
Factor 3: Limited Capacity and School Performance Restraints	.000

These levels are lower than expected due to two interrelated causes. First, this was a result of the merging of three distinct instruments to develop a survey that addressed specific lines of inquiry. This merging of existing survey instruments created a potential depression in alpha scores. Second, and perhaps most importantly, the low alpha levels indicate individual self-disagreement between the leader's perception of American schools (in general) and their specific school. This form of in-group bias (Olson, 2019) is reflected in the outcomes of the Cronbach Alpha tests provided. While we believe these levels are directly related to both instrument structure and self-disagreement among responses, this challenge was articulated as an important potential limitation that could impact response reliability. Subsequent studies utilizing this instrument on a national or international level may assist with refining the developed instrument. Despite this limitation, however, subsequent analysis was completed to help provide some additional insight regarding the reported variance.

The following tables (5, 6, 7, and 8) provide an overview of the PCA results. They indicate the main dimensions or factors present in the data, and the reliability of these dimensions in further analysis/interpretation in research or various decision-making processes (source). Specifically, Table 5 provides insights into the amount of variance each principal component captured from the dataset: component 1 (questions/statements associated with college and career preparedness) captured 23.23% of the variance, component 2 (issues related to the challenges in preparing students for post-secondary success) captured 15.56%, and component 3 (examining the constraints with which school leaders must contend) captured 13.44%. By adding these elements, 52.24% of the total variance was accounted for.

Table 5 *Total Variance Explained*

Cor	mponents	Tot al	Initial Eigenv alues % of varianc e	Cumul ative %	Extrac tion Total	Sums of Square d % of Varianc e	Loadin g Cumul ative	Rotati on Total	Sums of Squar ed % of Varian ce	Loadin g Cumul ative %
1	College and Career Prepare dness	3.253	23.233	23.233	3.253	23.233	23.233	2.827	20.19	20.195
2	Challen ges in Preparin g Student s	2.1 69	15.563	38.796	2.179	15.563	38.796	2.367	16.90 7	37.102
3	Constrai nts and School Perform ance Challen ges	1.8	13.448	52.244	1.883	13.488	52.244	2.120	15.14 2	52.244

Note. Extraction Method: Principal Component Analysis

Detailed analysis and the alignment of specific responses provided insight into related questions within the survey instrument. For instance, the factor analysis for the "College and Career Preparedness" line of inquiry was completed and it was found that there is a strong association between responses related to question/statement 18 ("High school graduates in this country are well-prepared for success in the workforce"), question/statement 19 ("College graduates in the U.S. are well prepared for success in the workforce") and question 13 ("High school graduates in this country are well-prepared for success in college"). This association is logical as each statement is similar to the other two and confirms the analytical grouping of specific survey questions. There are also comparable, but lesser, outcomes when exploring the domain of "Challenges to Preparing Students" where agreement statements 15 ("Schools in the U.S. are better today than at any other time") and 17 ("I am excited about the future of pk-12 public education in the United States"). With these aligned findings, a greater determination of the validity of responses can be ascertained, and it is possible to obtain additional verification regarding the use of identified common themes emerging from these responses. These correlations are highlighted in Table 6.

Table 6

Rotated Component Matrix

Variable	Component 1	Component 2	Component 3
Q3RC		.80	
Q4RC		.54	
Q5RC		.34	.58
Q6RC		.71	
Q7RC		.77	

Variable	Component 1	Component 2	Component 3
Q8RC			.68
Q9RC			.48
Q13	.78		
Q14			.58
Q15	.57		.44
Q16RC	.35		
Q17			.68
Q18	.89		
Q19	.78		

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations.

Contrasting perceptions also emerged when specific questions/statements were analyzed. For example, there were contrasting viewpoints emerging from questions 28 ("Where does raising the bar for entry into the profession rate regarding the top strategy to attract talented and diverse candidates to the teaching profession?") and 26 ("Where does providing more leadership opportunities rate regarding the top strategy to attract talented and diverse candidates to the teaching profession?") when compared with question 32 ("Where does making it easier to leave and return to teaching without losing retirement benefits rate regarding the top strategy to attract talented and diverse candidates to the teaching profession?"). In this analysis, it was clear that while leaders

at schools and school leaders were highly receptive to utilizing retired educators as classroom instructors, there was reluctance to reduce requirements for individuals who serve as teachers and opposition towards increasing leadership opportunities for teachers. This may relate to the belief that increasing responsibility for the classroom educator will lead to an increased workload and potential burnout or abandonment of the profession by the individual teacher (source). The inverse correlation is highlighted in Table 7.

Table 7Rotated Component Matrix

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Variable	Component 1	Component 2	Component 3	
Q23			•	
Q24		.44	.75	
Q25		.73		
Q26	.79			
Q27			49	
Q28	.84			
Q29			63	
Q30		75		
Q31		68		
Q32	65			

Variable	Component 1	Component 2	Component 3
Q33			45

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.

Table 8 highlights a discovered anomaly associated with this specific factor analysis, as it focuses on the various challenges in preparing rural students for post-secondary life. There did emerge a strong correlation between questions 38 ("How effectively does your school district meet the academic and non-academic needs of students performing above grade level?") and 39 ("How effectively does your school district meet the academic and non-academic needs of LGBTQ+ students?") which was unexpected and has led to additional discussions about subsequent research regarding the overlap of high-achieving students and those individuals who identify as LGBTQ+ within rural school settings. As previously mentioned, only 3.2% of respondents indicated that they believed their school was effective or highly effective in working and supporting LGBTQ+ students. Yet, 66% of respondents indicated they were effective or highly effective in working with students who were performing above grade level. From an initial review, this association highlights the need for additional study into understanding the role of leaders in supporting subsections of student populations within their rural schools and school districts.

Table 8Rotated Component Matrix

Variable	Component 1	Component 2
Q35	.72	
Q36		.45

Variable	Component 1	Component 2
Q37	.85	
Q38		.79
Q39		.75

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

Discussion

This project sought to understand how rural school and district leaders perceive the challenges impacting their schools and students and how they view the future of public education in the United States. Although the data was collected from leaders in a single state in the Rocky Mountain West, the results offer valuable insights into the persistent challenges and perspectives of principals, superintendents, and other school leaders. By identifying which areas are deemed most crucial or less important by education professionals, we can gain a deeper understanding of the pressure points affecting these leaders and explore potential solutions.

Two general strands emerged from this research, with an emphasis on the use of the developed descriptive data, as it succinctly illustrates the key emerging themes. The first finding of note is the predictability of responses related to two key areas that most district and school leaders must address daily – challenges related to financial budgets and the ongoing challenges of finding and retaining classroom educators. These common themes are found in nearly every nation and many schools worldwide (Dillberti & Schwartz, 2021). With limited developed solutions to address these two concerns, these issues will likely remain unresolved and will continue to impact rural schools and students.

The second distinct finding centers on unexpected responses regarding student populations that are often marginalized or not highly visible in many rural locations. For both homeless and LGBTQ+ students, respondents indicated that addressing the needs

of these students and the specific challenges of these populations in rural contexts was not a significant worry or concern. This contrasts with existing scholarship regarding LGBTQ+ students who have expressed significant concern about their experience in rural schools (Roberts et al., 2023; De Pedro et al., 2018). Responses that indicate that their schools were "not at all effective" in working with homeless students and LGBTQ+ students were nearly nonexistent, with 0% and 2.2% (respectively) responding to this category. In addition, 9.8% of leaders stated that working with LGBTQ+ students "did not apply" in their school/district or were neutral in how they view their school's ability to work with this distinct student population effectively.

It is unclear whether these responses and findings reflect the reality of these student populations in these areas or if they reflect a perceived reality as determined from the viewpoint of the school and district leaders themselves. The application of a constructivist theory for this study allows for respondent expression based on their own experience, or their lack of experience. Based on this constructivist platform, it is logical to examine and note that individual self-perception of a situation tends to be expressed through the various filters and lenses of the respondent (Bingham, Mitchell, & Carter, 2024). Although we might not always be aware of the specific filters and lenses shaping them, individual perceptions and viewpoints often influence their beliefs about school and district operations. Further investigation into this finding could provide valuable insights.

Recommendations & Implications

Findings from this study offer valuable insights into the perspectives and concerns of rural school leaders in one Rocky Mountain state, and the obtained perspectives can help inform policies and practices that impact rural education. Several recommendations and implications directly connect to the research question that focuses on leaders' perceptions of the students and the effectiveness of their schools/districts. As expressed by these respondents, in most schools, there is a clear and immediate need to improve the academic performance of underprepared students, support students living in poverty, and recruit and retain educators. To remedy this issue, it would be beneficial to have policymakers and educational stakeholders prioritize initiatives and resources to address these pervasive and significant concerns. While past initiatives have involved targeted

funding, professional development programs, and community partnerships (Deslandes, 2009; Galdames-Calderon, 2023), new approaches should be developed to address these persistent problems impacting rural schools and rural education. Initiatives that leverage higher education resources and personnel to teach and support rural schools, for example, should be encouraged, as should considering modifications to the length and structure of the academic school year, the length of the school day, and innovative compensation plans available to educators. Only through new approaches will long-term solutions to these ongoing challenges be developed.

It was also seen that school leaders perceive varying levels of effectiveness in addressing the needs of different student populations. This includes homeless students, students below and above grade level, non-native English speakers, and non-conforming gender students (Miles & Grogan, 2022). To ensure equitable educational opportunities for all students, there is a need for targeted interventions and support services tailored to the unique needs of these diverse populations. This may involve implementing enhanced culturally responsive teaching practices, providing language support services, and enhancing safe and inclusive school environments for all students. It may also necessitate bringing in diverse educators, community leaders, and other educational stakeholders to provide insight to teachers, community members, and students about the realities of living and working in a diverse, multicultural society. One challenge for many rural schools is the isolation related to remoteness. Overcoming this through establishing and maintaining effective collaboration with individuals from outside the local rural community can also be a beneficial step towards supporting comprehensive student learning and development.

Legislators at the state and federal levels play a critical role in shaping educational policies and allocating resources for rural schools (Dayton, 2003). These elected officials must begin to construct solutions based on research-identified emerging needs so rural communities can ensure equitable distribution of funding and resources – leading to optimal educational outcomes for rural students. These efforts may involve advocating for policies that address rural-specific challenges, such as funding formulas that account for the unique characteristics of rural schools and districts by providing targeted support for rural educator recruitment and retention efforts. Many rural schools in the United States are utilizing imported labor from Asia and Africa to serve as classroom educators.

Policymakers should take proactive steps to ensure that high-quality educators are available to students in rural schools – and ensure that rural students have extensive exposure and appreciation for diverse peoples and global cultures.

Rural schools are often the heart of their communities, and strong partnerships between schools, families, and community organizations are commonplace and essential for student success. In most rural districts throughout the United States today, school leaders actively engage with community stakeholders to identify local needs, leverage community resources, and foster a sense of shared responsibility for educational outcomes. These efforts should continue to be encouraged, as should collaborative initiatives such as after-school programs, community-based learning opportunities, and parent engagement activities that enhance the overall educational experience for rural students and local community members. Understanding the perspectives and concerns of rural school leaders is crucial for informing policies and practices aimed at improving rural education and putting together action steps to bolster areas of strength and address deficiencies. Rural leaders have many issues to deal with daily, and are involved in many larger multi-year initiatives, such as enhancing exposure to diversity, providing valuable and relevant professional development for classroom teachers, and advocating for policy changes at both the state and federal levels. With an enhanced understanding of how these leaders view their districts and their students' challenges, more direct approaches that are both amenable and beneficial to the students in these rural communities can and should be developed. With a baseline understanding of existing opinions and viewpoints, developing and implementing practical solutions should be immediately employed.

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References

Alexander, R. J., Doddington, C., & Cambridge Primary Review (Organization). (2010).

The Cambridge primary review research surveys. Routledge. https://doi.org/10.4324/9780203121672

- Bingham, A. J., Mitchell, R. & Carter, D. S. (2024). *A practical guide to theoretical frameworks for social science research*.

 Routledge. https://doi.org/10.4324/9781003261759
- Bouck, E. C. (2004). How size and setting impact education in rural schools. *The Rural Educator*, *25*(3), 38–42. https://doi.org/10.35608/ruraled.v25i3.528.
- Burfoot-Rochford, I. (2020). Heroin, prescription opioids, and rural superintendents:

 Understanding rural district and superintendent responses to the opioid epidemic in western Pennsylvania. *Journal of Research in Rural Education, 36*(1), 1-13.

 https://doi.org/10.26209/jrre3601
- Cai, J. (November 6, 2023). Students in rural public schools: By the numbers. *American School Board Journal*, 210(6). https://www.nsba.org/ASBJ/2023/december
- Chandra, K. (2012). *Constructivist theories of ethnic politics*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199893157.001.0001
- Copeland, J. D. (2013). One head--many hats: Expectations of a rural superintendent. *Qualitative Report*, *18* (77).
- Daly, M. C. (2021). From gaps to growth: Equity as a path to prosperity. *FRBSF Economic Letter*, *2021*(26), 01-07.
- Dayton, J. (2003). Rural school funding litigation: A review of recent cases, judicial–legislative interactions, and emerging trends. *Journal of Education Finance*, *29*(2), 157-183.
- De Pedro, K. T., Lynch, R. J., & Esqueda, M. C. (2018). Understanding safety, victimization and school climate among rural lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth. *Journal of LGBT Youth, 15*(4), 265-279.
- Deslandes, R. (2009). *International perspectives on contexts, communities and evaluated innovative practices: Family-school-community partnerships.*Routledge. https://doi.org/10.4324/9780203875667
- Diliberti, M. K., & Schwartz, H. L. (2021). The K-12 pandemic budget and staffing crises have not panned out yet: Selected findings from the third American school district panel survey. data note: Insights from the American educator panels. research report. RR-A956-3. RAND

 Corporation. https://doi.org/10.7249/RRA956-3

- Dorrell, L.D. (October 10, 1991). You can't look forward to tomorrow while holding on to yesterday: Rural education and the at-risk student. Paper presented at the annual conference of the National Rural Education Association.
- Educators for Excellence (2023). Voices from the classroom: A survey of American's educators. Educators for Excellence. https://e4e.org/teachersurvey
- Freeland, E. P. (2015). *Public opinion: Social attitudes* (Second ed.). Elsevier Ltd. https://doi.org/10.1016/B978-0-08-097086-8.32119-5
- Gallup Research (2018). Leadership perspectives on public education: The Gallup 2018 survey of k-12 school district superintendents. Gallup.
- Galdames-Calderón, M. (2023). Distributed leadership: School principals' practices to promote teachers' professional development for school improvement. *Education Sciences*, *13*(7), 715. https://doi.org/10.3390/educsci13070715
- Gewers, F. L., Ferreira, G. R., Arruda, H. F. D., Silva, F. N., Comin, C. H., Amancio, D. R., & Costa, L. D. F. (2022). Principal component analysis: A natural approach to data exploration. *ACM Computing Surveys*, *54*(4), 1-34. https://doi.org/10.1145/3447755
- Gutierrez, E. & Terrones, F. (2023). Small and sparse: Defining rural school districts for K-12 funding. *Center on Education Data and Policy*. Urban Institute.
- Hayes, S. D., Flowers, J., & Williams, S. M. (2021). "Constant communication": Rural principals' leadership practices during a global pandemic. *Frontiers in Education*, https://doi.org/10.3389/feduc.2020.618067
- Heck, D. (2022). Teacher educators as public intellectuals: exploring possibilities. *Asia-Pacific Journal of Teacher Education*, *50*(2),118 129. DOI: 10.1080/1359866X.2022.2049700.
- Howley, A., Howley, C. B., Rhodes, M. E., & Yahn, J. J. (2014). Three contemporary dilemmas for rural superintendents., 89(5), 619–638. https://doi.org/10.1080/0161956X.2014.956556
- Kamrath, B. (2022). Revisiting the revolving door of rural superintendent turnover. *The Rural Educator*, *43*(2), 1-33. https://doi.org/10.55533/2643-9662.1325
- Leclerc, L., Kennedy, K., & Campis, S. (2021). Human-centered leadership in health care: A contemporary nursing leadership theory generated via constructivist

- grounded theory. *Journal of Nursing Management*, 29(2), 294-306. https://doi.org/10.1111/jonm.13154
- Lindqvist, H., & Forsberg, C. (2023). Constructivist grounded theory and educational research: Constructing theories about teachers' work when analyzing relationships between codes. *International Journal of Research & Method in Education, 46*(2), 200-210. https://doi.org/10.1080/1743727X.2022.2095998
- Liu, X. S., & Ramsey, J. (2008). Teachers' job satisfaction: Analyses of the teacher follow-up survey in the United States for 2000–2001. *Teaching and Teacher Education*, *24*(5), 1173–1184. https://doi.org/10.1016/j.tate.2006.11.010
- Lochmiller, C. R. (2021). Rural superintendents' responses to COVID-19: Navigating local control during a public health crisis. *Frontiers in Education*, 6:617058. https://doi.org/10.3389/feduc.2021.617058
- Ludden, A. B. (2011). Engagement in school and community civic activities among rural adolescents. *Journal of Youth and Adolescence*, 40(9), 1254-1270. https://doi.org/10.1007/s10964-010-9536-3
- Lund, S., & Karlberg-Granlund, G. (2023). Making rural areas attractive for teachers and principals: Putting rural educational settings on the agenda. *Nordic Studies in Education*, 43(2), 181-196. https://doi.org/10.23865/nse.v43.3983
- Marré, A. (2017, April). Rural education at a glance. *Economic Information Bulletin*. https://www.ers.usda.gov/publications/pub-details/?pubid=83077
- Miles Nash, A., & Grogan, M. (2022). Leadership and the U.S. superintendency: Issues of race, preparation and impact. *School Leadership & Management*, 42(1), 24–43. https://doi.org/10.1080/13632434.2021.1922375
- Munyan-Penney, N., & Mehrotra, S. (2023). Future of assessments: Centering equity and the lived experiences of students, families, and educators. *Education Trust*
- Myende, P. E., Samuel, M. A., & Pillay, A. (2018). Novice rural principals' successful leadership practices in financial management: Multiple accountabilities. *South African Journal of Education*, 38(2), 1-
 - 11. https://doi.org/10.15700/saje.v38n2a1447
- Naik, G. R. (2018). Advances in principal component analysis: Research and development. Springer. https://doi.org/10.1007/978-981-10-6704-4

- National Center for Education Statistics. (2023). Educational Attainment in Rural Areas. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/coe/indicator/lbc.
- National Center for Education Statistics. (2023). Enrollment and School Choice in Rural Areas. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved from https://nces.ed.gov/programs/coe/indicator/lcb.
- Nieto, S. (2005). Public education in the twentieth century and beyond: High hopes, broken promises, and an uncertain future. *Harvard Educational Review*, *75*(1), 43.
- Olson, N. J. (2019). The best of friends, the worst of friends: The divergent effects of seeking the best on in-group identification and bias. *Advances in Consumer Research*, *47*, 794-795.
- Patall, E. A., Vite, A., Lee, D. J., & Zambrano, J. (2024). Teacher support for students' psychological needs and student engagement: Differences across school levels based on a national teacher survey. *Teaching and Teacher Education,* 137. https://doi.org/10.1016/j.tate.2023.104400
- Roberts, T., Roberts, L., Carpenter, Z., Haueisen, S., Jones, A., Schutte, K., & Smith, T. (2023). Existing in the void: An interpretative phenomenological analysis of rural LGBTQ+ students. *Journal of LGBT Youth, 20*(4), 836-864. https://doi.org/10.1080/19361653.2022.2104774
- Shelton, S. A. (2022). "communities of discomfort": Empowering LGBTQ+ ally work in a southeastern rural community. *English Education, 54*(3), 177-195.
- Showalter, D., Hartman, S. L., Johnson, J., & Klein, B. (2019). Why rural matters 2018-2019: The time is now. A report of the Rural School and Community Trust. *Rural School and Community Trust.*
- Taie, S., & Lewis, L. (2022). Characteristics of 2020–21 public and private K–12 school principals in the United States: Results from the national teacher and principal survey first look (NCES 2022-112). *U.S. Department of Education and National Center for Education Statistics*. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2022112.

- Tourangeau, R., Rips, L.J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge University Press.
- University of Michigan Surveys Lab (2001). School leader questionnaire 2000-2001. Regents of the University of Michigan.
- Wastiau, P., Blamire, R., Kearney, C., Quittre, V., Van de Gaer, E., & Monseur, C. (2013). The use of ICT in education: A survey of schools in Europe. *European Journal of Education*, *48*(1), 11–27. https://doi.org/10.1111/ejed.12020
- White, R. S. (2023). Ceilings made of glass and leaving en masse? Examining superintendent gender gaps and turnover over time across the United States. *Educational Researcher*, 52(5), 272–285.

 https://doi.org/10.3102/0013189X231163139
- Williams, H. P., Shoup, K., Durham, L. C., Johnson, B. A., & Dunstan, S. (2019). Perceptions of rural superintendents on factors influencing employment decisions. *School Leadership Review, 14*(2), 1–15.

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