



Building Educator Capacity in Rural Arkansas

Research Brief Fall 2023

Introduction

Rural students constitute a substantial portion, approximately one-fifth, of the U.S. student population (Showalter et al., 2019). Unfortunately, their schools and communities often do not provide the same opportunities and experiences as those in nonrural areas. During the pandemic-related school closures, only 42% of district leaders in rural areas reported being able to provide online learning opportunities to all students, compared to the 62% reported in suburban districts (Herold, 2020). Recent analysis highlights the widening performance gap between rural and nonrural students from

third to eighth grade, with nonrural students consistently outperforming their rural counterparts (Johnson et al., 2021). In rural areas, fewer high school students enroll in college, resulting in lower average educational attainment, which, in turn, may limit employment opportunities and impede upward mobility (Marré, 2017; Wells et al., 2023). The presence of ongoing challenges such as geographic isolation, limited resources, and staffing difficulties in rural districts (Biddle & Azano, 2016; Goldhaber et al., 2020) often prompt the need for collaborative solutions to effectively improve educational opportunities in rural areas. In the fall of 2020, the National Institute

for Excellence in Teaching (NIET) began a partnership with the Walton Family Foundation to improve teaching and learning in rural districts through the Arkansas Rural Educator Network (AREN). AREN pursues this goal by building educator capacity through customized professional learning that includes coaching, training, and networking opportunities. AREN has served 27 rural districts across the state over the past three years, impacting over 23,000 students in its third year. This brief describes AREN activities and highlights some impacts of the partnership.

Arkansas Rural Educator Network (AREN)

AREN offers customized solutions for districts and schools, along with structured professional learning and networking activities across the school year. To address each district's unique needs, NIET collaborates with AREN districts to develop a customized support plan using a strengths-based needs assessment. This strengths-based needs assessment (SBNA) involves reviewing student data, conducting interviews with district and school leaders, engaging in conversations with teachers and students, and conducting classroom observations. Upon completing the SBNA, NIET shares feedback on areas of strength and areas to focus on for additional professional learning. Based on these findings, NIET works with each district to create a customized support plan for coaching and training that includes long-term goals and a timeline for achieving the goals. To further enhance educator capacity, district and school leaders engage in structured monthly networking meetings throughout the school year. These meetings center around topics of interest identified by these leaders. NIET utilizes these topics to design a cohesive and progressive learning experience. During these meetings, leaders engage in discussions, sharing strategies to improve teaching and learning based on the year's identified themes. Facilitated by NIET, district and school leaders share their experiences in implementing lessons from the previous meeting and collaborate on addressing common challenges. Finally, to ensure the implementation of learning, NIET provides onsite guidance in applying best practices learned in these meetings.



Impact of the AREN Partnership

To enhance teaching and learning, AREN provides customized professional learning to district and school leaders, which includes coaching, training, and networking opportunities. This section summarizes district and school leaders' satisfaction with these activities, as well as the observed impact on teaching and learning in the third year of the partnership. The key findings are as follows and are described in more detailed below.

1. 99% of surveyed district and school leaders expressed satisfaction with the professional learning opportunities.
2. 95% of surveyed district and school leaders rated the quality of the networking meetings as either good or excellent.
3. A statistically significant improvement was observed in teacher observation scores within a randomly selected sample of AREN district teachers.
4. 90% of AREN districts outperformed their matched comparison districts on student achievement growth in at least one subject tested by the Arkansas state assessments.

Satisfaction with AREN Activities

To evaluate district and school leaders' satisfaction with AREN activities, an end-of-year survey was administered at the end of the 2022-2023 school year. District and school leaders were asked to rate their satisfaction with the professional learning provided by the AREN partnership on a 4-point scale: Very Satisfied, Moderately Satisfied, Moderately Dissatisfied, and Very Dissatisfied. They were also asked to rate the quality of the networking meetings during the 2022-2023 school year on a 4-point scale: Poor, Fair, Good, Excellent. The results indicate that 99% of surveyed district and school leaders were satisfied with the professional learning provided by AREN. Among them, 86% were very satisfied and 13% were moderately satisfied (see Figure 1). Additionally, 95% of surveyed district and school leaders rated the quality of the networking meetings during that year as either good (41%) or excellent (54%) (see Figure 2). Overall, these findings suggest high levels of satisfaction among district and school leaders with AREN activities.

Improvement in Teacher Performance

To assess the impact of building district and school leaders' capacity on teaching and learning, a random group of teachers in each AREN district was observed twice during the 2022-2023 school year: once in the fall and once in the spring. These observations were conducted using the NIET Teaching and Learning Standards Rubric, focusing on six indicators selected to address the instructional needs identified in AREN districts. Teachers received scores from 1 (Unsatisfactory) to 5 (Exemplary) on each indicator, which were then averaged to create a summative score. An analysis using a paired sample *t* test was performed to examine whether teacher performance improved from the first to the second observation. The results show a statistically significant improvement in teacher observation scores, with a medium effect size ($t(63) = 6.13, p < .001, \text{Cohen's } d = 0.77$). This finding suggests that the increase in observation scores among these teachers was not due to chance and holds practical significance.

Improvement in Student Achievement

To assess the impact of professional learning on student achievement growth, each AREN district was matched to a comparison district based on the same locale type, student demographics, and student performance using data from the 2020-2021 school year. Student achievement growth was defined as the change from the 2020-2021 to the 2022-2023 school year in the percentage of students passing the Arkansas state assessments. For an AREN district to outperform its comparison district, the AREN district must have student achievement growth greater than its comparison district in at least one of the four tested subjects (English, reading, math, and science). The analysis found 90% of AREN districts outperformed their comparison districts in at least one tested subject. This outcome is statistically significant, as determined by a single sample *z* test for proportions with 50% as the null hypothesis ($z = 3.71, p < .001$).

Figure 1. District and School Leaders' Satisfaction with Professional Learning

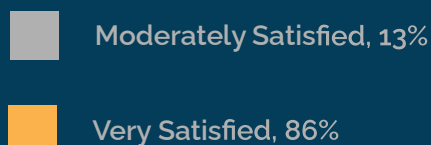
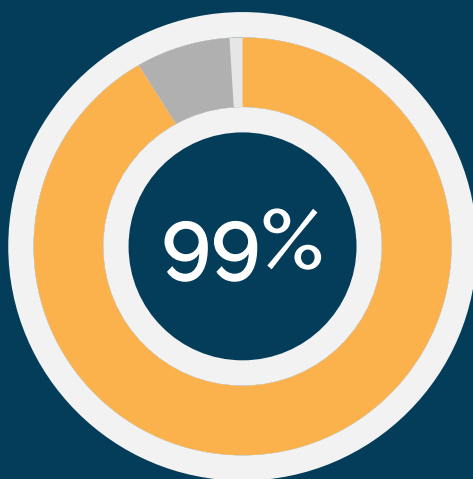
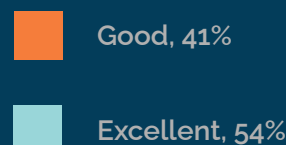
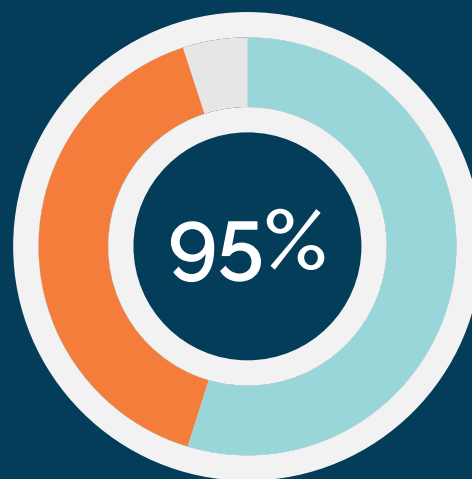


Figure 2. District and School Leaders' Perceptions of the Networking Meetings





Conclusion

AREN was established to improve teaching and learning in rural districts by building educator capacity through customized professional learning, which includes coaching and training, as well as networking opportunities. This network of rural districts provides district and school leaders from across the state with opportunities for collaboration, actionable strategies to strengthen

district and school leadership capacity, and tailored support to improve teaching and learning. The impact of the AREN partnership on educators and students in rural communities is evident. District and school leaders expressed high levels of satisfaction with professional learning and networking opportunities. Additionally, AREN districts saw improvement in the performance of a randomly selected group of teachers, along with positive student achievement

growth. The AREN partnership attributed success to its commitment to providing targeted, high-quality service that meets the needs of each district's unique needs. This holistic approach ensures that the extended support remains relevant and fine-tuned, solidifying the partnership's resounding success.

References

- Biddle, C., & Azano, A. P. (2016). Constructing and reconstructing the "Rural School Problem": A century of rural education research. *Review of Research in Education*, 40(1), 298–325. <https://doi.org/10.3102/0091732X16667700>
- Goldhaber, D., Strunk, K. O., Brown, N., Naito, N., & Wolff, M. (2020). Teacher staffing challenges in California: Examining the uniqueness of rural school districts. *AERA Open*, 6(3). <https://doi.org/10.1177/2332858420951833>
- Herold, B. (2020, April 10). The disparities in remote learning under coronavirus (in charts). *Education Week*. <https://www.edweek.org/technology/the-disparities-in-remote-learning-under-coronavirus-in-charts/2020/04>
- Johnson, A., Kuhfeld, M., & Soland, J. (2021). The forgotten 20%: Achievement and growth in rural schools across the nation. *AERA Open*, 7. <https://doi.org/10.1177/23328584211052046>
- Marré, A. (2017). Rural education at a glance, 2017 edition. U.S. Department of Agriculture: *Economic Information Bulletin No. 171*. <https://www.ers.usda.gov/webdocs/publications/83078/eib-171.pdf?v=42830>
- Showalter, D., Hartman, S. L., Johnson, J., & Klein, B. (2019). Why rural matters 2018-2019: The time is now. *The Rural School and Community Trust*. <https://files.eric.ed.gov/fulltext/ED604580.pdf>
- Wells, R. S., Chen, L., Bettencourt, G. M., & Haas, S. (2023). Reconsidering rural-nonrural college enrollment gaps: The role of socioeconomic status in geographies of opportunity. *Research in Higher Education*, Advance online publication. <https://doi.org/10.1007/s11162-023-09737-8>