



School Improvement in Rural Communities: An Intentional Approach to Systemic Support

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Executive Summary

Rural educators, policymakers, and stakeholders encounter substantial challenges as they strive to provide optimal educational opportunities in the context of ongoing economic and social shifts in their communities. Through an intentional approach to systemic support, the Illinois Center for School Improvement (Illinois CSI) at the American Institutes for Research (AIR) helps educators to maximize assets and address challenges in a continuous improvement process.

The Illinois State Board of Education (ISBE) established Illinois CSI to provide identified districts with strategies to transform schools and raise performance measures. AIR operates Illinois CSI on behalf of ISBE, providing intensive improvement services to hundreds of districts and schools within a statewide system of support. This report highlights selected approaches to supporting educators as they meet the unique needs of rural districts and schools.

National Context

According to *Why Rural Matters: Understanding the Changing Landscape* (Showalter, Klein, Johnson, & Hartman, 2017), a biennial report from the Rural School and Community Trust, approximately one in six public school students in the United States attend a rural school. Recent research has examined how to best serve these students in light of distinct challenges. Although it is important not to overgeneralize observations, moving past simplified notions about rural schools and communities to a more thorough exploration of unique contexts considered from multiple perspectives, research and experience have revealed common themes that warrant attention.

In a half decade of collaboration alongside rural educational leaders, Illinois CSI's District Assistance Team (DAT) members have recognized similar themes in practice and nuanced their approach to best support schools, districts, and communities in rural contexts.

Challenges and Opportunities

The usefulness and comparability of research findings related to rural education are complicated by varying definitions of "rural." The U.S. Department of Education's National Center for Education Statistics (NCES) offers a common definition, having adopted a classification system in 2006 based on both population size and proximity to urban centers. These criteria reflect a primary challenge faced by rural districts and schools: access to key resources.

Real limitations exist with regard to accessing resources and services in rural areas across the country as well as in the state of Illinois. Progress on complicated targets for improvement under the best circumstances is often slow and labor intensive. Yet years of experience supporting educators have revealed key themes for service delivery designed to strengthen any system's continuous improvement efforts, while having unique potential to expand upon available resources in a rural context. These strategies can be replicated across the country while attending to distinct needs within the state, district, school, and classroom.

This report focuses on four areas of impact revealed in a review of literature and reinforced through Illinois CSI's work with districts and schools: (a) Governance and Management: Rural District and School Leadership, (b) Teacher Effectiveness: Recruiting and Retaining High-Quality Teachers, (c) Access to Rigorous Courses: Online Learning and Dual Enrollment, and (d) Pursuit of Postsecondary Education: Perceptions and Preparation. Emergent themes for

systemic support that cross these areas of impact often pose both challenges and potential solutions in a rural context.

Rural Education in Illinois

Although Illinois fairs better than many states regarding several rural education indicators, rural districts and schools in Illinois do exemplify challenges related to rural education across the nation. Illinois public schools served 178,919 rural students (8.7% of all public school students in Illinois) in the 2013–14 school year. This absolute number of rural students is almost twice that of the national median. In the same year, although 20.9% of the state’s regular elementary and secondary public schools were considered rural by the Rural School and Community Trust’s measures, rural districts received 9.5% of state education funding (Showalter et al., 2017).

With 15.4% of rural students in Illinois qualifying for individualized education programs, Illinois had one of the highest rates of special education qualification in rural America. More than a third (38.2%) of Illinois’s rural students were eligible for free or reduced-price lunch. The Rural School and Community Trust’s college-readiness measures for Illinois’s rural students clustered around national medians, yet only 50.9% of rural students took the ACT or SAT tests in 2013–14 (Showalter et al., 2017).

Illinois CSI Approach

In a statewide system of support, Illinois CSI assists districts through a continuous improvement process aimed to address data-driven priorities for growth. This process includes data-based assessment of needs; planning for improvement based on research, evidence, and innovative thinking; implementation of a focused plan with worthy targets; progress monitoring of adult practices and student performance; and evaluation of the results and process.

Stimulated by an organizational theory of action based on research, Illinois CSI simultaneously assists collaborating districts in the strengthening of critical infrastructures necessary for systemic improvement. These critical infrastructures include:

- an intentional data system centered on evidence-based practices for data use and data management, contributing to a culture that places data at the heart of decision making;
- monitoring systems and feedback loops to ensure that improvement efforts address critical needs with the implementation of effective, systemic, evidence-based practices; and
- interdependent, data-informed leadership teams that communicate bi-directionally across district, school, and instructional levels to continually assess needs and execute improvement priorities via systemwide implementation of evidence-based practices.

Illinois CSI’s service delivery model includes individualized coaching and collaborative networking opportunities that support district, school, and instructional leaders and teams, while integrating evidence-based practices corresponding to clearly articulated improvement priorities.

The following narrative highlights creative approaches to opportunities and challenges in rural districts served by Illinois CSI. These unique cases are prefaced by research overviews placing them in relation to broader systemic issues facing rural districts and schools nationwide.

Governance and Management: Rural District and School Leadership

National Data on Rural Education

The challenges facing rural districts and schools are complex and diverse, including school law, finance, personnel, government mandates, and district or board policies.

Rural School and Community Trust's *Why Rural Matters* report (Showalter et al., 2017) provided an overall priority ranking of the 50 states, showing the greatest needs in rural education. It contains state-by-state data on demographics, poverty, student achievement, state resources, and college and career readiness. Key findings in the *Why Rural Matters* report include the following (Showalter et al., 2017):

- In 13 states, at least half of public schools are rural. Overall, more than one in four schools are rural in the United States; more than one in six students attend schools in rural areas, and more than one in four rural students are children of color.
- Half of rural school districts in 23 states have enrollments smaller than 485 students (the national median enrollment for rural districts).
- The top 10 national priority states—those with the greatest needs in rural schools across an array of measures—are Mississippi, Arizona, Alabama, South Carolina, South Dakota, Georgia, Nevada, Florida, Oklahoma, and Alaska.
- Half of all rural students live in just 10 states: Texas, North Carolina, Georgia, Ohio, New York, Pennsylvania, Virginia, Alabama, Indiana, and Michigan.
- Student achievement is positive overall—but low in some states. Scores are lowest for rural students in New Mexico, Mississippi, Alabama, Hawaii, and Louisiana.
- Measures of students' preparedness for higher education and career paths are varied. For example, most rural 11th and 12th graders in Ohio take one or more Advanced Placement courses, but only 5% do so in Louisiana. Less than one in four rural juniors and seniors take the SAT or ACT in California and Oregon.
- The majority of rural students identify as non-White in several states, including California. In New Mexico, 85% of rural students are children of color, the highest rate in the United States. New Mexico also has the highest rate of students from low-income families at 85%. Nevada has the nation's highest mobility rate for rural students at 17%—followed by Oregon and Colorado.
- Resources for rural schools often are a major concern. Per-student investment for rural students is lowest in Idaho and Oklahoma; each state spends less than \$4,400 per rural student. Spending is highest in Alaska and New York; each state spends roughly \$12,000 per student.
- Rural educators' pay is frequently low, and states and districts struggle to find and keep quality educators in these areas. Salary averages are lowest in Kansas, Missouri, and Arkansas, and salaries are highest in Alaska and New York.

- Most of the top 10 priority states enrolled no more than 12% of their 4-year-olds in public prekindergarten classes—including South Dakota, Nevada, Alaska, Mississippi, and Arizona, all of which enrolled 6% or fewer of eligible preschool students.

As evident by the data above, most school buildings are considered to be in rural parts of the United States (Showalter et al., 2017). There are several unique challenges and opportunities to the leadership of rural districts and schools. The superintendent in a rural setting often finds himself or herself to be the only administrator in the district; therefore, he or she must fulfill multiple roles and responsibilities. The next section focuses on the challenges faced by rural leadership (superintendents and principals) and describes how districts and schools can integrate the unique qualities and culture of their communities in a systemic and innovative process to support for district and school leaders in improving student achievement.

Rural District and School Leadership

The roles of rural superintendents are multiple and varied. The literature on rural leadership provides many suggestions for meeting the challenges of the rural district leadership role. Superintendents note specific challenges related to rural settings include a lack of acculturation to the demands of rural school leadership (Lamkin, 2006). In Lamkin’s (2006) study, rural superintendents in New York, Pennsylvania, and Tennessee identified challenges related to their lack of adequate training for specific tasks and skills, as well as challenges related to the rural environment. In addition, the superintendents in the study indicated the communities they served have close-knit relationships among the residents, which led to emotional frictions when considerations for educational change were made.

In addition, due to increased expenses and decreased revenue, rural districts are often forced to reduce expenditures. Few solutions exist for decreasing budgets beyond reducing staff members. Because of reduced funding, school districts across the United States utilize a shared superintendent model in which one individual is contracted to serve as the superintendent of two school districts. The following lists several examples:

- In Iowa, 52 of the school superintendents serve two districts (Murphy, 2017). This is due to decreases in funding and enrollment, and state incentives to districts that share administrative personnel.
- In Nebraska, Superintendent Cuning has served dual superintendency for two decades to help his districts to save money (Beem, 2006).
- In North Dakota, the state agency has asked districts to enter into interlocal cooperative agreements to cut costs (Beem, 2006).
- In some states, school districts that share administrative and student services can earn extra state funds.
- In Wisconsin, the number of superintendents employed at three-quarter time or less increased to 91 from 40 since 2000 (Wisconsin Taxpayer Alliance, 2011).

A few rural schools in Illinois are supported by a part-time superintendent whose role is shared with another district. Dual superintendency is a track for protecting small communities and

requires an ambitious leader who is willing to shoulder the administrative tasks of two or more districts in an effort to reduce each district's financial cost (Beem, 2006). In such a role, the superintendency is more than a full-time job, and the administrator faces twice the work: two budgets to develop and monitor, two school boards to respond to, and two sets of priorities to follow. For some school communities, the dual superintendency is part of an extended relationship, giving the community time to consider a permanent merger. For other districts, sharing a superintendent is the only way to avoid a forced consolidation, of which many rural communities are not in favor.

Members of professional organizations and agents of state education departments can work together to provide ongoing support and can differentiate support based on location and difference in type of leadership roles. One former Illinois superintendent, Terry Robertson, cultivated potential superintendents through professional development while serving as a dual superintendent in west-central Illinois in the late 1990s (Beem, 2006). Robertson's school district spanned more than 500 square miles of farmland, and he relied greatly on principals and other administrators to run the district. Flexibility and an understanding of the greater need are required for school boards sharing a superintendent (Beem, 2006). As of 2017, another superintendent in Illinois, Charles Stegall, currently juggles a schedule as the superintendent of both the St. Anne Grade School District #256 and St. Anne Community High School District #302, which located across the street from each other, less than 800 yards apart in the same township. In addition to serving as superintendent in these two districts, Superintendent Stegall also collaborates with leaders Lorenzo Smith Pembroke School District, which is located 9.2 miles away, whose students feed into the high school.

In some small, rural school districts, a single superintendent serves dual roles by also serving as the school principal. Although the individual in a dual position has two sets of job responsibilities, the administrator is forced to prioritize his or her work at the expense of some duties. Most superintendents find that budget and board relations are a major focus, whereas curriculum development lags behind (Copeland, 2013). Besides having two sets of responsibilities, superintendents with dual roles require several strong skills. Skill sets such as personal communication, being a good listener, and displaying empathy are essential to effective leadership (Copeland, 2013). Principal and Superintendent Ryan Hobbs has served Eldorado, Illinois Unit 4 school district for the past 6 years. Eldorado is a K–12 district where Hobbs serves as both the high school principal and superintendent of the district. Eldorado has been working with Illinois CSI DATs on the district's school improvement process. Superintendent Ryan Hobbs shared:

Collaboration among all of our buildings has been a major focus in our District Leadership Team meetings. It has really helped us look at things as a whole district instead of just by building. These efforts are helpful to our district leaders who wear many hats within the district. Being exposed to the continuous improvement process both through the individual, on-site coaching we have received and also through our participation in the District Leadership Team Learning Network through Illinois CSI, has helped us tremendously. The ability for us to get to network and learn from other districts and schools that are similar to ours throughout the state is an experience we have not had previously. As a result of that experience, we now have reached out to other districts in our southern part of Illinois to continue learning and sharing with other rural schools.

In a multiple-case study (Forner, Bierlein-Palmer, & Reeves, 2012) of the leadership practices of seven rural superintendents, the leadership practices of effective superintendents (Waters & Marzano, 2006) were linked to the unique context of rural school districts. Positing the unique situation of rural districts, the study sought to discover additional traits necessary for leadership success in the context of specific rural challenges, including poverty and economic loss, the many responsibilities incorporated into expectation of rural superintendents, and the unique visibility of rural superintendents. The study highlighted seven effective practices for rural school leadership to consider: (a) established goals and expectations that drive reform; (b) built support for reform through direct, personal conversations with staff and school board; (c) practiced constructive confrontation by providing intervention strategies for struggling students and providing intervention strategies for struggling teachers; (d) removed low-performing teachers or principals; (e) leveraged close working relationships with building principals; (f) took a firm line in union contract negotiations, and (g) realigned financial commitments to match district priorities (Forner et al., 2012). In addition, the study established three effective rural leadership priorities that include ensuring that all students can and will achieve academic success, ensuring that a high-quality teacher will be maintained in each classroom, and ensuring that resources will be created. Prior to Illinois CSI's arrival, no functioning leadership teams dedicated to student achievement existed in Meridian Community Unit School District 101. Working with Illinois CSI, Meridian leaders have established a functioning District Leadership Team (DLT) that meets regularly to discuss a continuous improvement plan that is focused on the specific goal of improving reading with an emphasis on comprehension. Team members established stakeholder consensus by collaboratively engaging in continuous improvement and accepting the responsibility of moving the district forward. As a result of their efforts, this rural district has seen a 7% increase in reading scores in the 2015–16 school year and 15% increase during the 2016–17 school year as measured by the STAR360 assessment.

Illinois CSI Systemic Strategies for Supporting Rural District and School Leadership

The vision of Illinois CSI is “high-performing districts, high-achieving students.” Each district and school in Illinois is working toward that end, as well as toward ensuring equitable access to high-quality instruction for all student groups in keeping with federal and state laws. It is the work of Illinois CSI to provide high-quality, coordinated, and consistent support to rural districts as well as to translate this vision into reality. Based on an extensive review of the research, Illinois CSI created a theory of action for its work.

Illinois CSI's theory of action posits that if a district (a) establishes interdependent, data-informed collaborative teams at all levels; (b) implements an intentional data system; (c) puts into operation a monitoring system with feedback loops; and (d) implements focused work deeply and with fidelity, then the collective adult practices and student performance will improve positively (Illinois CSI, 2015). To support districts in achieving these conditions, Illinois CSI is designed to provide Priority and Focus services to rural school districts.

The continuous improvement approach crafted by Illinois CSI includes an assessment of prioritized needs; planning for improvement based on research, evidence, and innovative thinking; implementation of a focused plan with worthy targets; progress monitoring of adult practices and student performance; and evaluation of the results and process. Continuous

improvement planning and supporting implementation, monitoring, and evaluation comprise the core approach for employing the theory of action to improve instructional practice, leading to higher achieving students.

Illinois CSI's approach is grounded in research, and it is both innovative and intentional to help districts improve student outcomes by:

- building capacity and fostering teamwork among district and school leaders and staff,
- using data to strategically guide continuous improvement,
- promoting peer networking and problem solving, and
- emphasizing the use of evidence-based practices for school improvement.

Illinois CSI facilitates continuous improvement in rural districts and schools to support schools across the state in three key methods of delivery: (a) on-site/virtual coaching, (b) District Leadership Team Learning Network (DLTLN), and (c) Principals Institute. A brief description of each method follows.

On-site/Virtual Coaching and Support to Rural District and School Leadership Teams

Illinois CSI staff are trained to equip district leaders with a comprehensive and powerful set of research-based continuous improvement strategies grounded in best practices that can be adapted to the needs of any district. DAT members visit their assigned districts multiple times each month both on-site and virtually, and they coach DLTs to increase student achievement through the implementation of measurable, research-based strategies. DATs consist of coaches and a district liaison who facilitate a collaborative district needs assessment to enable districts to identify key areas of need and focus for improvement. This process helps district leaders develop, implement, and refine district improvement plans and practices. Illinois CSI's approach to raising student achievement is to help districts create high-functioning leadership teams that rely on relevant data, monitoring, and feedback to ensure best practices are implemented effectively and deeply.

District Leadership Team Learning Network

The current literature supports the need to establish web-based training, coaching support systems, and networking among small rural school districts (Lamkin, 2006). Illinois CSI is the leader in providing research-based coaching supports to rural districts receiving Priority and Focus services. As part of its core mission to increase district-level capacity for exceptional teaching and learning, Illinois CSI also created the DLTLN as a professional development resource for rural district leaders. The DLTLN is a series of dynamic, interactive sessions that bring DLTs from across the state together as an extension of the coaching that districts receive from Illinois CSI. Participants establish a broad community of practice that connects and supports district leaders to deepen and expand their continuous improvement efforts. All Priority and Focus districts can participate in DLTLN sessions as part of the services they receive from Illinois CSI. DLTLN sessions are tailored to meet districts where they are in their improvement efforts.

Benefits of the DLTN

- DLTN provides participants with research-based practices; practical tools and resources; and structured, collaborative networking opportunities with other districts in the same geographical area.
- Illinois CSI staff guide rural districts through its continuous improvement process, which is aligned across district plans and efforts.
- DLTN attendees discuss best practices to enhance their effectiveness, and they network and problem-solve with colleagues.
- Eligible participants earn continuing professional development units for attending on-site DLTN sessions.

Between these face-to-face sessions and web-based training, Illinois CSI DATs continue to meet, work, and communicate with each DLT and School Leadership Team (SLT) independently, coaching the DLT and SLT on refining its plan and aligning its other continuous improvement efforts. Most respondents (at least 95%) agreed or strongly agreed that participation in the DLTN allowed them to apply their learning in their district and that attending the DLTN was a good use of their time.

Principals Institute

Illinois CSI launched the Principals Institute especially for rural school principals and assistant principals of rural districts receiving Priority and Focus services. The Principals Institute comprises a series of professional development sessions designed to help school leaders develop and enhance their leadership capacity for district and school improvement efforts. School leaders attended four sessions in locations within their service areas throughout the state. The sessions focused on the following:

- Crucial elements of an interdependent team structure and effective team practices that drive continuous school improvement
- Tools for assessing team effectiveness
- The role of the school principal in building effective teams
- Protocols and processes to reflect on current individual and team practices and leadership style
- Components of the continuous improvement process and plan

More than 90% of the cohort 1 participants reported that the sessions met their intended outcome. More than 300 Illinois school leaders participated in the sessions over two separate cohorts. Professional development that is focused on supporting principals as instructional leaders and tools for data-informed decisions, especially in rural or remote locations, is critical to a successful dual administrator model (Clarke & Wildy, 2011). In addition, networking opportunities with other rural leaders enables leaders to be as effective as possible in rural or remote locations.

Collaboration With Professional Organizations and the State Agency

Recent literature findings recommend that practitioners in the field, members of professional organizations, and agents of state education departments all need to agree to work together by forming advisory councils or stakeholder partnerships to review, evaluate, and reform existing programs and to establish new ones (Bell & Pirtle, 2012). Illinois CSI has taken a lead role in Illinois State Board of Education’s Statewide System of Support by working with organizations across the state (State Board of Education, Illinois Principals Association, Regional Offices of Education and Intermediate Service Centers, Illinois Association of School Boards, Illinois Association of School Business Officials, Illinois Statewide Technical Assistance Collaborative, Illinois Resource Center, and Illinois Response to Intervention Network) to provide rural school superintendents and principals with access to services across the state that support the district’s continuous improvement process. One service includes collaboration with a partner who provides an online professional development portal for districts through the state agency. Illinois CSI also collaborates with organizations and universities throughout the state, facilitates meetings and discussion among stakeholders, and has developed statewide partnerships with other organizations. In addition, the DLTN and Principals Institutes sponsored by Illinois CSI provide training for district and school leaders to establish interdependent data-informed leadership teams at the district, school, and instructional levels with collaboration for all stakeholders.

Illinois CSI Example Case: Venice CUSD 3—Small District, Big Changes

Illinois CSI provides Priority services to districts large and small, urban and rural, from Chicago Public Schools to one-school districts such as Venice Community Unit School District (CUSD) 3. Venice, located near East St. Louis, enrolls 105 students, and more than 90% are from low-income homes. As a result of its own desire for improvement and supported by coaching from Illinois CSI, the small district has been working quickly toward large-scale transformation.

During the past year, the district implemented a math curriculum when previously it had none. Teachers are now conducting data-driven meetings, when the norm had been nonexistent communication from one grade level to the next. The relationship between the school board and the instructional staff also has improved significantly.

So, what happened? “It starts at top,” said Alexa Tate, Illinois CSI’s district liaison with Venice. “Venice’s superintendent, Dr. Cullen, has been instrumental in the change. He oversees everything, is innovative, has insights about instructional practices, and builds upon the tools Illinois CSI has introduced.”

Conclusion

Rural student populations are increasing, and explicit attention from policymakers and organizations planning is essential for improving low-performing schools. District and school transformation can be influenced both positively and adversely by contextual factors found in rural areas (Bell & Pirtle, 2012). At the same time, rural settings offer many unique resources, such as small size and close-knit local community, that can be leveraged to promote the transformation of low-performing schools.

“We’ve had to make some difficult decisions,” Dr. Cullen said. He continued:

It also helped that some of the most outspoken opponents for change have left the district. But Illinois CSI also provided structures and tough questions that have helped us develop our own capacity for seeing through ambitious plans. For example, our Illinois CSI team has taken the lead with facilitating our District and School Leadership Team meetings and professional learning communities. But Illinois CSI has also been releasing more and more of the responsibility of leading these meetings to my teachers and principal.

Venice has taken advantage of the services offered by Illinois CSI’s partners, particularly Illinois Association of School Boards and Illinois Association of School Business Officials. Both organizations belong to Illinois State Board of Education’s Statewide System of Support, the services of which Illinois CSI helps coordinate.

Teacher Effectiveness: Recruitment and Retention

Research on Recruitment and Retention

There is little question that teachers are an important influence on what children can achieve in school. Empirical research has indicated that regardless of a child's background, their level of achievement in school depends on the teachers they have (Lloyd, Mensch, & Clark, 2000; Rivkin, Hanushek, & Kain, 2005). Research has shown that disadvantaged, rural communities lack the resources necessary to recruit and retain good teachers. This problem extends to a difficulty in attracting and retaining highly qualified teachers in STEM (science, technology, engineering, and mathematics), special education, career and technical education, and foreign language. Furthermore, rural schools tend to have a larger share of inexperienced teachers than their urban and suburban counterparts, which limits collaboration opportunities in smaller rural districts (Hanushek, Kain, & Rivkin, 2004); Ingersoll, 1996; Jackson, Rodriguez-Barraquer, & Tan, 2012; Lankford, Loeb, & Wyckoff, 2002).

Further evidence has established a connection between local economic indicators, such as per-capita income and the percentage of qualified teachers in a school (Li, Park, & Wang, 2007). The rural-urban educational inequality is exacerbated with research evidence that shows a connection between local economic indicators and the percentage of qualified teachers in a school (Li et al., 2007). Many highly skilled educators opt to teach in larger districts where they can earn a significantly higher salary than a rural district can provide. Research further points to the unequal distribution of newly qualified teachers.

Strategies for Recruiting and Retaining High-Quality Teachers

Students in rural schools may be disadvantaged by (a) the narrow scope of curriculum in their schools (Monk, 2007; Oakes & Maday, 2009); (b) instructional practices that constrain individual opportunities for acceleration and remediation (Howley, Rhodes, & Beall, 2009); and (c) their lack of access to the supports and resources of programs, organizations, and educational institutions prevalent in urban and suburban areas (Johnson & Strange, 2007; Mackety & Linder-VanBerschot, 2008; Monk, 2007). Another struggle for recruiting and retaining high-quality teachers in small, rural schools is the ability of the school and district to support their staff professionally. Sufficient training, resources, and support build capacity and a sense of efficacy. Collective teacher efficacy can make an educational difference over and above the educational impact of a students' home or community (Tschannen-Moran & Barr, 2004, p. 190). John Hattie (2012) ranked collective teacher efficacy as a leading factor influencing student achievement based on a meta-analysis done by Eells (2011). Eells' (2011) analysis showed a strong relationship between collective efficacy and student achievement with an effect size of 1.57, which is significantly higher than Hattie's visible learning research, which compared student achievement with other factors like feedback (0.75) and socioeconomic status (0.52), student motivation and concentration, and persistence and engagement (0.48) (Hattie, 2012). Collective teacher efficacy, when present, can contribute significantly to a school's level of academic success, and it is a contribution that comes from the school—not the home and not the students themselves. These data are further substantiated in Bob Marzano's (2003) research. He concluded from his analysis of research conducted over

35 years that “schools that are highly effective produce results that almost entirely overcome the effects of student backgrounds” (p. 7).

Just as some administrators fill dual roles in rural districts, not only are teachers sometimes responsible for teaching rigorous content, but also they have the burden of performing multiple roles and are stretched to juggle the responsibilities of each (Nelson, 2010). The depth of lesson content likely suffers because teachers are being called upon for duties outside of the classroom. Small schools in rural districts often assign one teacher to teach multiple grades or one teacher may constitute the whole department. In settings such as this, there is little or no opportunity to collaborate and draw from the experience of other teachers in the school. Opportunities for professional development may be limited, unlike the numerous trainings and workshops that are accessible to rural teachers’ urban counterparts.

Strategies for Supporting Teacher Effectiveness in Rural Schools

To promote student learning in rural schools, the advantages and disadvantages of rural communities should be taken into account. Community plays an important role in the rural school setting. The small size of rural schools and the student–teacher ratio are both assets, as are the strong relationships among the people who constitute the schools and communities. Another benefit to some rural schools is that teachers commonly reside locally and have strong attachments to their school communities. Strong connections like this can support and sustain quality teachers and principals who are dedicated to providing quality education to the students in their community. Researchers in the United States and internationally have documented the ways in which teacher interpersonal skills influence the teacher–student relationship and, ultimately, student learning (Houser & Frymier, 2009; Rodríguez, Plax, & Kearney, 1996). Researchers have described the relational aspect of teaching that can facilitate learning. Teachers who remain to teach in their local district and school may have an advantage with students and may be more successful in motivating students to achieve than someone from outside the community. Inspired teaching, attentiveness to each student’s interests, personality, and readiness for mastery can lift the student’s sights beyond the local horizon.

Educators tend to experience professional development in isolation in rural schools because teaching specialties do not always have the luxury of critical mass (Erlandson, 1994). Vital to teacher effectiveness is finding innovative ways for rural educators to network and collaborate with others who may be teaching in the same or similar contexts. Networking can strengthen teacher capacity by inspiring educators to learn from each other, share strategies that address their unique challenges, and spread best practices throughout the rural schools in the area with minimal impact on financially fragile budgets.

A prerequisite to preparing students for postsecondary education is providing rigorous content that prepares students for college coursework. Teachers’ instruction must foster critical thinking; provide challenging work that encourages student interest in engineering, science, and information technology; provide strategies for problem solving and teamwork; and highlight writing to articulate student thinking. An approach for fostering professional learning communities might be to network faculty from several districts. Pooling resources with neighboring rural schools and districts is effective in reducing budgetary strain in any one district (Nelson, 2010). The key for any successful mediation for the issues that plague rural schools is

having exposure and access to usable and sustained expertise. In recent years, the concept “community of practice” has been borrowed from organizational studies and applied to school settings (Wenger, 1998).

Redding and Walberg (2012) offered several action recommendations for improving learning in rural schools:

- Change the school culture by intentionally addressing student motivation to learn.
- Employ incentives for students and staff.
- Focus on consistent, effective instructional practice.
- Foster classroom and peer group morale.
- Encourage self-instruction (continued learning beyond the regular school day).
- Employ distance technologies.
- Foster academically constructive out-of-school activities (working with parents to influence students’ out-of-school life).
- Employ programs for K–12 parents.

The school–university partnership can foster communal learning with university professors and staff delivering content expertise as well as resources to strengthen teachers’ capacity in accommodating students’ learning needs. Southern Illinois University-Carbondale engaged in a school–university partnership with five rural southern Illinois communities (Prusaczyk & Baker, 2011). A rigorous in-service professional development program was offered in Cognitively Guided Instruction for 12 schools and 45 teachers. There have been other partnerships developed with the sole purpose of fostering teacher professional development to rural school staff to strengthen teachers’ capacity in rigorous instruction and content.

Virtual coaching has gained momentum in recent years and affords schools cost-effective means for providing coaching support to teachers using videotapes from classroom instruction. AIR has used virtual coaching with several schools across the country. In partnership with Harvard University’s Center for Education Policy Research, AIR and Harvard have provided video-based coaching in mathematics in more than 16 school districts around the country, including rural and urban communities. AIR uses the Mathematics Quality Instruction Rubric (MQI) developed by Harvard researchers to coach teachers in mathematics instruction. The coaching model is defined by regular, virtual one-to-one collaborative conversations about videotaped classroom instruction between an AIR coach and the teachers. The conversations focus on viewing, analyzing, and offering feedback to improve instruction.

The virtual coaching model was developed around a core theory of action: When teachers learn to analyze their instruction using the MQI, they will (a) more accurately perceive their own pedagogical strengths and weaknesses, (b) use the MQI score points to identify and plan to implement immediately attainable goals for growth, and (c) take responsibility for and measure their own progress during periodic coach–teacher meetings. When such opportunities are embedded in regular, routinized coaching cycles and conversations, teachers can improve their

instruction over time. By tailoring coaching conversations to specific teachers' needs, the program thus maximizes teachers' opportunities to learn. Giving teachers opportunity to watch clips of their own instruction has a dual purpose: to help teachers recognize and begin to understand key mathematical and pedagogical practices as well as to ground teachers in good, better, and best examples of these practices.

Districts might also seek to establish cross-disciplinary learning communities within a school (Lattuca, 2001). The most effective approach to impacting teacher practice is to present data in context using qualitative data, quantitative data, and examples so that teachers in rural areas feel that those providing support understand the challenges that are specific to their school. The Rural School Collaborative partners with several organizations in Illinois, including The Association of Illinois Rural and Small Schools, Central Illinois Rural School Partnership, Southeastern Illinois Community Foundation, and Southern Illinois University Carbondale College of Education and Human Services.

Illinois CSI Approach to Support Teacher Effectiveness

Illinois CSI has identified 29 research-based indicators that characterize efficient and effective high-performing districts. The Core Functions and Indicators (CFIs) are designed to increase student and adult performance. The CFIs form the basis of Illinois CSI's approach to continuous district and school improvement. The CSIs are grounded in research and provide facets of a high-functioning organization for schools to strive toward. For example, one indicator of a high-functioning school calls for every teacher to use research-based instructional techniques; support students with intense educational needs; respond to students' physical, social, and emotional barriers; and engage students in meaningful instructional activities. Illinois CSI will work shoulder to shoulder with the district to cultivate an effective organization based on this research.

Illinois CSI Example of Instructional Support in Illinois

Illinois CSI also employs instructional support specialists who possess expertise in areas such as assessment, curriculum, special education, English language learners, and learning supports. These specialists collaborate with DATs to utilize tools and resources that allow districts to monitor their own progress. DATs work collaboratively with districts to address district and school goals and to assist district leaders in using strategic planning to create goals for measurable gains in student achievement. Instructional support specialists with Illinois CSI have also been providing technical assistance to many rural Illinois schools to support and promote STEM programming in districts and schools where the focus had been primarily on English language arts (ELA) and mathematics achievement.

This year, the state of Illinois transitioned to using the SAT college entrance exam for all 11th-grade public school students; as a result, Khan Academy introduced diagnostic and SAT practice tests on their website. Khan Academy is a free resource available for students and teachers. It provides individualized learning for students, with standards-aligned missions in math and student progress and skills reports available for teachers. Support for some schools and districts serviced through Illinois CSI helped teachers use Khan Academy to support math instruction and SAT preparation. Members of Illinois CSI consulted with several high schools in central Illinois to develop a plan to provide students with access to Khan Academy and set goals to increase SAT scores. One district developed a math committee to evaluate math interventions for its K–8 students by utilizing the Khan Academy grade-level missions in the middle school. In addition, many rural southern Illinois school districts received professional development and technical assistance for staff to enhance their math and ELA instruction.

In addition to math support, Illinois CSI has been working with several rural schools and districts around the state to support student learning and achievement in mathematics and ELA through science without losing science content by emphasizing the overlaps among science and engineering practices, mathematical practices, and ELA skills. Two Illinois districts in particular, Roxana District 1 and East St. Louis District 189, have begun to take a deep dive into the specific practice of engaging in argument from evidence, which is a skill found in all three content areas. Explicit support is provided to unpack the various aspects of a skill, including how it is similar and different in each of the content areas, and strategies are discussed and modeled to incorporate those pieces into daily instruction. Most importantly, cross-curricular conversations with all content areas within a school or district are fostered, and teachers are connected with other grade-level science teachers to provide networking and collaboration opportunities. Finally, this support addresses the inequity in access to STEM programming that has arisen within schools and districts as a result of a long-term focus on math and ELA in isolation.

Illinois CSI also hosts Research Forums that bring together national and local experts who share the latest in practical education research and best practices with district leaders, Illinois CSI staff, and statewide system of support partners that equips them with strategies to positively impact student outcomes. The Research Forum series provided content-specific opportunities to enhance understanding by featuring national education experts such as Dr. Anthony Muhammed (2017) or content experts like AIR's own Dr. Kirk Walters (2015). Topics explored during these forums included combating issues affecting school culture and student achievement and implementing student-centered mathematics instruction. Survey results show that 96% of Illinois CSI Research Forum participants found the Research Forum very useful. The materials and videos from the Research Forum are made available on Illinois CSI's website: www.air.org/center/illinois-center-school-improvement.

Conclusion

Rural schools have unique needs and face unique challenges. Rural school leaders unquestionably recognize that their greatest challenges are hiring and maintaining effective teachers, providing access to a well-rounded education, and offering a diverse array of courses. The need for highly qualified staff is paramount in addressing these needs so that rural schools can operate at a high level of success. Research has shown that at the school level, collective teacher efficacy beliefs contribute significantly to a school's level of academic success (Hattie, 2012). Creating conditions where teachers can be effective requires strategies and partnerships that address the specific needs of a rural school. Illinois CSI has a deep bench of experts and stands ready to partner with districts and schools to provide expertise in tailoring a system of support with research-based strategies.

Access to Rigorous Courses: Online Learning and Dual Enrollment

Rural schools often are limited in the range of classes they can offer because of their small size and number of staff members, access to educational resources that might advance students' learning, and ability to provide remedial support to struggling students (Redding & Walberg, 2012). Several other factors contribute to the lack of college preparatory classes in rural areas, including small student enrollments; limited financial resources; and as indicated in the section on Teacher Effectiveness, challenges in recruiting and retaining teachers, particularly in math and science (Jimerson, 2006; Johnson & Strange, 2007; Picciano & Seaman, 2009). Students in rural schools also face transportation barriers to being able to attend dual-enrollment courses on college campuses. This section focuses on the issue of obtaining access to rigorous curriculum and the challenges faced by rural schools in providing online learning and dual enrollment for their students.

Online Learning

Administrators in small, rural districts use online and distance learning courses to provide students with diverse course opportunities their schools could not otherwise offer (Picciano & Seaman, 2009). However, technological limitations—both in the accessibility of technology and the restricted periods when technology is available—are perceived as obstacles to offering online and distance learning courses (Holian, Alberg, Strahl, Burgette, & Cramer, 2014). Broadband Internet access can become an issue especially when virtual and digital learning is an essential component of learning.

A national survey of rural school systems in the United States indicated that most rural school districts used distance learning, and the subjects most frequently taught by distance learning were math, foreign language, and English (Hannum, Irvin, Banks, & Farmer, 2009). A majority of districts indicated satisfaction with distance education courses; almost half stated they were very satisfied and did not see connectivity as a barrier to distance education use. Rather, funding, scheduling, and difficulty implementing distance education courses were cited as barriers.

Online and blended learning are both seen as a cost-effective modality to meet the needs of students by providing a variety of course offerings, improving graduation rates through credit recovery, accelerating time to obtain a diploma, building bridges to college careers, and differentiating instruction (Picciano & Seaman, 2009).

Dual Enrollment

In 2008, the Illinois Dual Credit Task Force emphasized the role of dual-credit programs in “offering opportunities for improving degree attainment for underserved student populations” (Illinois Dual Credit Task Force, 2008, p. 8). There are many benefits of dual-credit programs for students: reduced costs for a college education, facilitated transition between high school and college, faster time to earning a degree, enhanced high school curriculum, developed connections between secondary and postsecondary institutions, and greater opportunities to underserved students (p. 7). Dual-credit and dual-enrollment courses provide high school students the opportunity to take college-level courses, which allows them to earn college credit while still in

high school. Students from small rural schools historically have not had access to dual-credit courses for several reasons, including distance from a college campus, affordability, and district teaching strength. A dual-credit program provides several benefits for high schools and community colleges as well dual-credit program partnerships.

Strategies for Supporting Access to Rigorous Courses in Rural Schools

Because of their small size and number of staff members, rural schools have a limited range of classes they can offer, limited access to educational resources that might advance students' learning, and limited ability to provide remedial support to struggling students (Redding & Walberg, 2012). Technology has made it possible to develop innovations and deliver enhanced classroom instruction to students in a rural school.

Virtual education can offer courses for high school students who otherwise would not have access. Rural districts and schools will need to build technology infrastructures for Wi-Fi availability so students can be provided with additional learning opportunities and teachers have access to necessary professional development to support student learning. Technology can enable a school to provide a wider range of curricular content for their students. To help mitigate these limitations, a school or district can provide technology that allows students to engage in distance learning, online courses from virtual schools, iTunes U, and correspondence courses.

Moreover, the use of technology can allow staff to find and examine innovative teaching practices and bring learning experiences to the classrooms through online tutorials and courses. For example, online tutorials can demonstrate how to use software in the classroom and with students; online videos can allow students to see places they might otherwise never experience. Providing appropriate technology and resources to teachers also allows them to further their own learning and acquire professional development through webinars and electronic media, thus reducing the need to travel over long distances. Technology can allow staff to network and share knowledge with teachers throughout the nation.

The Illinois Virtual School, funded by the Illinois State Board of Education, provides students across the state with access to a variety of online courses while staying enrolled in their current school. Students can utilize Illinois Virtual School for credit recovery or full-service courses taught by Illinois licensed, quality instructors.

Rural communities in Illinois rely strongly on agriculture, and students need to be educated on the most current skills and practices to be ready for the job market. Rural schools can provide course offerings with an emphasis on agricultural science and can benefit by forming partnerships with universities with strong agricultural programs. Many local organizations, cooperative extension programs, 4H centers, and Future Farmers of America continue to play an important role in rural education (Bell & Pirtle, 2012).

Rural districts frequently collaborate with other districts, organizations, and postsecondary institutions to provide resources for their students. Community colleges and community partnerships can support extended-learning activities and training, such as early college high schools, tutoring, apprenticeships, cooperative education programs, and summer employment for students (Bell & Pirtle, 2012).

Illinois CSI Example Case of Dual Programming in Illinois

In Illinois, an area collaborative high school vocational education program hires staff from the local community college where the program is housed. In turn, the college provides free tuition to an entire course catalog of dual-enrollment courses. Westville District 2 and Georgetown-Ridge Farm District 4, both in rural Illinois, utilize College Express as the career and technical dual-credit program for their high school juniors and seniors. More than 400 area high school students travel daily to the Danville Area Community College campus for instruction in one of its 15 career programs in which the students receive both high school and college credits. Most students who enter the program as a junior will graduate from high school with at least 12 college credit hours earned. The classes, books, and fees are free to the students, but their home high school districts pay reduced tuition and fees for each student enrolled in the program. In most cases, transportation to the college also is provided by the school district. As a result, nearly two thirds of the juniors and seniors in Westville have been on a higher education campus by graduation, and one third have received at least 25 credit hours toward their first year of college.

Recently, educational funding has changed the face of this program. The district will continue to provide the opportunity to students, but the college is now charging the district half tuition for each student. The district will no longer be able to provide bussing to the college from the school. Free and reduced student tuition will be one fourth of the original fees. Illinois CSI's approach to this work is to support the DLT and SLT in the collection of data to identify students on track for graduation; support students with the transition to SAT; establish a monitoring system for students earning Ds and Fs, credit recovery, and attendance; and support the development and review of curriculum to ensure rigor and relevance. Our DATs have also worked with DLTs, SLTs, and Professional Learning Communities to support articulation of curriculum and assessments K–12.

District–community partnerships and innovative teaching benefit students by enriching learning opportunities. For example, Hinckley-Big Rock CUSD 429 secured funds from the America's Farmers Grow Rural Education program to develop an apple orchard. The orchard, part of the district's learning laboratories in agricultural education, offers a setting for science experiments and other hands-on learning experiences that will help students understand research and production processes. Produce from the orchard will be given to the community's local food pantry. The Grow Rural Education program provides grants to local public school districts to help enhance STEM education. After being nominated, school districts submit applications to compete for \$10,000 or \$25,000 grants to help fund projects that enhance their STEM curriculum. The America's Farmers Grow Rural Education program also awarded grants to 12 school districts in the state of Illinois, including Lewistown and Scott-Morgan School District, which both receive support from Illinois CSI.

Conclusion

Rural schools and districts can leverage online learning opportunities as well as dual-credit programming for their students. Even though there are obstacles to providing online courses across rural regions, the economic impact and benefit of concurrent enrollment opportunities will offset current barriers. Districts and schools can address the barriers and challenges that rural areas face and at the same time integrate the unique attributes and resources found in rural communities to promote the transformation of low-performing schools.

Pursuit of Postsecondary Education: Perceptions and Preparation

Significant economic and population changes in rural American communities affect the employment opportunities and adult life choices available to youth. The Rural High School Aspirations Study (2007–2011), a project of the National Research Center on Rural Education Support funded by the Institute of Education Science, evaluated high school intervention programs based on information gathered from geographically diverse regions across the United States. Focus areas included (a) rural high school students’ aspirations and preparatory planning for postsecondary education, career training, and adult life; (b) commonalities and differences in the students’ perspectives regarding the futures of rural youth; and (c) the availability of high school programs and activities to help prepare them for their futures. The study indicated that most rural youth (89%) aspired and sought ways to extend their educational opportunities beyond high school in various forms: two-year community colleges; vocational or trade schools; four-year college degree programs; and graduate or professional schools (Irvin, Meece, Byun, Farmer, & Hutchins, 2001).

Yet, national statistics may reveal a discrepancy between rural students’ aspirations and actual attainment; rural students demonstrate lower enrollment rates especially compared with students from nonrural settings. According to 2015 calculations from the National Center for Education Statistics, only 29.3% of young adults ages 18–24 who graduated from rural schools were enrolled in any postsecondary educational program, compared with 42.3% from cities, 47.7% from suburbs, and 42.3% from towns. Graduates from rural schools also ranked lowest in enrollment in undergraduate or professional programs when considering individuals ages 25–29 (National Center for Education Statistics, 2015).

Strategies for Supporting Pursuit of Postsecondary Education

Strategies to support postsecondary educational opportunities for students in rural settings range from practical efforts, such as increasing Internet access for students to research postsecondary options, to more affective efforts to examine deeply rooted perceptions related to the role of postsecondary education in reaching professional and personal goals. A review of the literature has revealed three major factors impacting college attendance rates: the student’s family’s experiences with and perceptions of postsecondary education, the student’s family’s financial resources and access to financial aid, and the student’s educational experience and preparation.

Family’s Experience and Perceptions of Postsecondary Education

Of these influencers, a student’s family, including their education levels and support for the student to attend college, plays a primary role. According to the National Postsecondary Education Cooperative (2007), “For traditional-aged students, across ethnic and racial categories and regardless of socio-economic status, parents play the strongest role in the college choice and decision-making processes” (p. 39). In another study, rural high school students were substantially more likely to expect to attend college if they felt they had parental support (Ali & Saunders, 2006). Parents’ and extended family members’ education levels, specifically whether they attended college,

also impact students' postsecondary decisions (Chenoweth & Galliher, 2004). In one examination of rural communities, youth from communities and families with a relatively greater proportion of adults who had at least a 2-year degree were more likely to indicate a personal goal of earning a college degree (Brown, Copeland, Costello, Erkanli, & Worthman, 2009).

A lack of prior experience with college can be alleviated when school-sponsored programs expose students to postsecondary options and prepare them for admission requirements. In one study, college visits and ACT preparation workshops (as well as meal and transportation on test day) were perceived as having the greatest impact on increasing the college-going rate among high school students (King, 2012).

Sandoval Community School District 501, in close collaboration with Illinois CSI, combats a lack of exposure to college experiences in various ways, including sponsoring daylong trips for high school students to a local college. While there, students sit in on classes and learn more about the application process. School personnel then follow up with necessary support.

Research has shown that relationships with adults and other students who will support, guide, and positively influence students in their efforts to attend college can also increase students' college-going rates (National Center for Education Evaluation, 2009). The National Center for Education Evaluation recommended that to increase college access, schools should "surround students with adults and peers who build and support their college-going aspirations" (p. 6). In addition, Hooker and Brand (2009) found that mentoring relationships was one of the most cited elements contributing to students' college attendance.

Examples of meaningful community engagement to provide mentorships for students exist among districts served by Illinois CSI in both rural and urban settings. The Peoria Public Schools Foundation, a support organization collaborating closely with the district, devotes time and fundraised resources to the recruitment and pairing of adult mentors for students. Middle school participants in the Horizons Club program meet weekly with mentors from a variety of professional sectors, allowing them to investigate multiple occupations and make more informed choices during high school class selection and beyond.

Family's Financial Resources and Awareness of Financial Aid

Although communication among students, parents, and school personnel is important in the college-going decision-making process, practical assistance in applying for financial aid and admission has had even greater effects (Plank & Jordan, 2001). In one study, the most commonly cited problem preventing college enrollment was a lack of financial resources, followed by not having information about college and not having information about financial aid (Chenoweth & Galliher, 2004). Fortunately, a family's awareness of and access to financial aid resources can be improved through meaningful family engagement programming through the district.

School-sponsored financial aid workshops have proven to increase student application and enrollment rates (King, 2012). The more directly workshops assist families in completing forms and applications steps, the greater the impact, studies have shown. The National Center for Education Evaluation (2009) recommended that schools "engage and assist students in completing critical steps for college entry" (p. 6) in order to increase college access. This

includes making families more financially aware and providing help for students in the process of applying for financial aid.

Barriers for students with lower socioeconomic status lessened when information, guidance, and assistance were provided (Plank & Jordan, 2001). Yet Bell, Rowan-Kenyon, & Perna (2009) noted a “lack of consistent mechanisms in most schools to channel information to students about the breadth of available educational opportunities available and the availability of financial aid and how to access it” (p. 677).

Timing also matters. In a study conducted with ninth- and 11th-grade students in five states, Bell et al. (2009) found that generally students lacked knowledge about college, especially about financial aid. Although the 11th-grade students had a greater awareness of college and obtained information from formal sources such as the school, in general, students received little information prior to their senior year. The surveyed students indicated they obtained information about college mostly from their families, the Internet, and to a lesser extent, school. These students expressed a need for personal and active methods of obtaining information at school.

Student’s School-Related Experiences and Perceptions

In addition to family experiences, resources, and processes, the student’s own school experience is crucial to the decision to pursue postsecondary education. Students’ school experiences relate both to actual preparedness and perceptions, and can benefit directly from district- and school-level efforts to improve school climate, learning conditions, and curricular opportunities. Ensuring students are prepared for college via strong curriculum, instruction, and course guidance are key to college-attending rates.

According to the National Center for Education Evaluation (2009), the two key issues related to increasing the number of students attending college are (a) ensuring students are academically prepared and (b) guiding students to take the appropriate steps for college entrance. Rigorous curriculum that prepares students for college-level work in conjunction with support services and assessment of progress are also important components in college-going decisions and future success at the postsecondary level (National Center for Education Evaluation, 2009). Hooker and Brand (2009) also found that the most often cited elements contributing to students attending and succeeding in college included “rigor and academic support” (p. vii).

Closely related, student perceptions are important determinants of a student’s educational decision making. In a study of rural high school students, Chenoweth and Galliher (2004) found that students’ college planning was related to high school curriculum as well as students’ ultimate educational goals, perceptions of preparedness and ability to succeed, self-perceived intelligence (p. 5), and comfort in the school setting (p. 10). Hardré, Sullivan, and Crowson (2009) found that rural high school students’ perceptions of the benefit of the knowledge and skills taught and the usefulness of the material delivered were predictors of their plans to attend postsecondary education. The students were more likely to plan to attend if they “felt competent and believed they could learn and develop skills in a school subject” (Hardré et al., 2009, p. 13). However, Attewell and Domina (2008) found that rural students with a lower socioeconomic status tend to choose a less demanding curriculum.

Illinois CSI Example Case: Scott-Morgan CUSD 2—Cultivating a Culture of High Expectations

In a deeply reflective, continuous improvement process, educators at Scott-Morgan CUSD 2 in Bluffs, Illinois, have identified disengagement as a barrier to students' present and future success. This finding now drives the development, implementation, and monitoring of a continuous improvement plan in close collaboration with Illinois CSI.

"They have made student engagement and working with students to see a bright future the focus of their efforts," said an Illinois CSI district liaison working closely with the district. "Conversations are focused on what teachers do to engage kids in their learning." District, school, and instructional leaders consider both realities and perceptions related to student achievement and attainment as they make connections between their students' school experiences and future goals.

Students are now included in conversations about their own formative and interim assessment data, as teachers and students work together to set specific learning goals. Improved test scores show positive impacts of this effort, whereas the affective responses of teachers, families, and students offer another way to gauge gains. The investment of all stakeholders has become more apparent, say district leaders, and teachers' sense of efficacy is growing.

Teachers have focused this renewed energy on systemwide implementation of key instructional practices. An Illinois CSI DAT member worked closely with teachers as they increased the rigor of math instruction in alignment with the state's learning standards, and district leaders are now making changes related to English language arts. The DAT member applauds the teachers' efforts in addition to their regular teaching loads, noting that most have a high number of courses to prepare for and teach due to the small number of teachers in the district. Still, teachers are motivated by positive changes in their classrooms.

"Everything we do ties to student engagement," one of a small number of focused targets within the district's improvement plan, said an Illinois CSI DAT member. Key to this effort is a districtwide focus on technology aimed to increase curricular options and student excitement for learning. A one-to-one technology initiative allows students to access another districtwide investment: virtual reality.

Through a districtwide virtual reality platform, students experience a world of possibilities they would not otherwise experience, according to Superintendent Kevin Blankenship. He believes innovative instructional practices, including the use of technology, will expand students' exposure beyond what is available in their small community and will spark in them positive goals for their future.

The young people of Bluffs, Illinois, will need different knowledge and skills to pursue their career goals than generations before them. Thus, the school district is taking an active role in sharing developments in career preparedness with students' parents, many of whom did not require postsecondary education to fulfill their current career roles.

Building shared value around K–12 education and its direct impact on the opportunities available after high school has become a districtwide effort that starts with the school system's staff and expands to encompass students, their families, and the greater Bluffs community.

Conclusion

In summary, district and school-level strategies to improve college attendance rates have proven successful and depend upon commitment and full implementation by the district and school staff. Specific strategies shown to promote college attendance include mentor relationships, admission and financial aid assistance, ACT and SAT test preparation and facilitation, goal-setting meetings, provision of college and career information, assistance with college and career application, college representative visits to school, and visits to colleges by students. Core to the pursuit of postsecondary opportunities is strong preparation via a viable curriculum delivered through evidence-based instructional practices. Illinois CSI provides direct assistance as educators strive to strengthen curriculum and instruction while effectively engaging students.

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Resources

AASA, American Association of School Administrators: <http://www.aasa.org/>

America's Farmers Grow Rural Education: www.americasfarmers.com/

Association of Illinois Rural and Small Schools: <http://www.airssedu.org/>

Center on Great Teachers and Leaders: <http://www.gtlcenter.org/>

How to recruit and retain teachers and other school leaders in hard-to-staff rural and small school districts: <http://www.serve.org/uploads/publications/Rural%20RecruitmentToolkit.pdf>

Illinois Virtual School: <http://www.ilvirtual.org/>

Institute of Education Sciences, National Research Center on Rural Education Support: <https://ies.ed.gov/ncer/RandD/details.asp?ID=131>

Institute of Education Sciences, Regional Education Laboratories <https://ies.ed.gov/ncee/edlabs/regions/>

Institute of Education Sciences, National Center for Education Statistics—Rural Education in America: <https://nces.ed.gov/surveys/ruraled/definitions.asp#>

National Center for Research on Rural Education: <http://r2ed.unl.edu/>

National Center for Teacher Effectiveness (NCTE): <https://cepr.harvard.edu/ncte>

National Council on Teacher Quality (NCTQ): <http://www.nctq.org/siteHome.do>

National Research Center on Rural Education Support (NRCRES): <http://ies.ed.gov/ncer/RandD/details.asp?ID=131>

National Rural Education Association: <http://www.nrea.net/>

Organizations Concerned About Rural Education (OCRE): <http://ruralschools.org/>

Regional Education Laboratory Midwest: <http://www.relmidwest.org/>

Rural Schools Collaborative: <http://ruralschoolscollaborative.org/our-work/partners>

Rural School and Community Trust: <http://www.ruraledu.org/>

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