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Getting Better Together: Innovations for Rural Learners and Communities

By

Hobart L. Harmon

Thomas A. Butler

Is your Educational Service Agency (ESA) getting better at meeting the needs of school districts? Are educated learners and viable communities important outcomes of rural school districts receiving services from the ESA? If the answer to these two questions is yes, then what process is in place to give ESA leadership confidence that the organization is getting better at meeting the unique educational challenges of rural learners *and* their communities? With 35 member school districts, most of which are rural, Intermediate Unit (IU) 8 in Pennsylvania is seeking to scale innovations that school systems are evolving as solutions to challenges in their local contexts. But consistent with its mission, IU8 seeks to make the innovations better, meaning more learner centered and community focused. IU8 is evolving a Getting Better Together (GBT) initiative that includes the CARE (Catalyzing Action for Responsive Education) process.

Background

Why must an ESA become more responsive to rural students and communities, and why now? The singular focus on test score accountability sparked by the 2001 federal No Child Left Behind (NCLB) law stimulated much "reform" in public education policies, programs and practices. Unfortunately, an unintended consequence with the need to achieve federal "adequate

yearly progress" in math and reading devalued the role of public education in many rural communities.

School systems aligned the curriculum to state standards in math and reading. Science, music, art, career and technical education and other subjects were often deemphasized, unless the curriculum subject was also included in the *end of course* exam requirements, like science was in Pennsylvania—then science became one of the *aligned* curriculums. In many school districts most components of the education system became singularly focused on improving one measurement: test scores. Budgets, strategic plans, and teacher/administrator professional development activities in the school system focused primarily on supporting test score attainment.

School and classroom doors soon closed, both metaphorically and physically, to key partners that traditionally had reinforced the symbiotic relationship of mutual benefits shared between a rural school and its community (e.g., youth community service projects). In many rural communities the local school lost one of its most important purposes—that of a vibrant community hub. No time was available for community organizations or volunteers to engage with students during the regular school day, unless their program or service reinforced state math and or reading learning standards.

School accountability pressures focused most teachers only on curricula, instructional practices and support materials that enabled them to dance with the big gorilla in the classroom—the outcome of higher test scores on standardized tests. The professional judgment of teachers in constructing educational practices and measuring student success were no longer valued in the new *standardized* way of school accountability. Moreover, administrators and teachers perceived project-based activities conducted in the community displaced classroom time

required for student academic success, an attitude reinforced by test-score accountability pressures.

Interestingly, some problems being *fixed* were created by the obsessive policy focus of improved test scores. A cottage industry of education reformers and innovators soon evolved, particularly those seeking federal funds (e.g., Race-to-the-Top) that were used as incentives to change public education for the better. School districts and school leaders found reformers and innovators of all sorts at their doors offering solutions to *fix the problem* of low test scores. These *partners* offered new strategies to the most pressing problems confronting public schools in the new era of test accountability. Additionally, dire fiscal circumstances in state and local school district budgets caused by The Great Recession made any source of external funding highly appealing.

Though well intended, and with exceptional expertise in designing and evaluating educational improvements, these outside interests sought to help school leaders develop and implement models of change with scientific claims of success. If implemented with fidelity, these new policies, programs and practices promised increases in what counted most in the new era of accountability, math and reading test scores—with intense focus on the lowest level of academic achievers. Public pressure to be listed as *approved* or *meets standards* rather than *needs improvement* on easily accessible state accountability report cards encouraged local school system leaders to fix the problems of low test results immediately.

As schools adopted solutions from outside interests, the effect on the parents' roles in their children's education underwent a significant change. Rigor became associated with mountains of homework for students. This forced many parents to assist—or try to assist—their children in hours of homework every night. Parents were being coopted into a system where state

standardized tests were the measure of a child's success in school. Parents were tacitly acknowledging their local school was failing to provide the education deserved and constitutionally guaranteed for all children.

Few large-scale innovations considered the rural context, with some exceptions. For example, the National Science Foundation systemic reform efforts (Harmon & Smith, 2012) and select projects of the U.S. Department of Education Investing in Innovation (i3) program (Fox et al., 2017) were focused on rural schools specifically. The vast majority of reform innovations, however, were urban oriented (Zuckerman, 2018).

Misguided Opportunity

Lost in the reform movement, particularly for rural communities, was the essential role of the public school in civic and community development. Confronted with demands for test success, teachers often decided that insufficient time remained for engaging their students in once popular and practical learning experiences in the community. Fixing the test problem failed to meet the economic, social, and civic development needs of rural communities (Biddle & Hall, 2017).

Popular community-based programs disappeared or became marginalized. For example, overall career and technical education (CTE) course taking declined (Hudson, 2013), or programs were reformed with less emphasis on workforce preparation (Symonds, Schwartz, & Ferguson, 2011). Youth organizations performed fewer community development roles as part of the school curriculum. As part of the reform agenda, numerous states revised the vision of traditional vocational education which had been designed for the Industrial Age.

However, far too many CTE programs lost their role as preparation for the workplace. Many existed as a vehicle to offer students more applied ways for learning the important knowledge demanded on state tests. Some remained as a reformed way to help prepare all

students for college, in a policy climate that advocated bachelor's degree attainment as *the way* to individual prosperity. The prevailing sentiment was that workforce attitudes and skills could be developed by postsecondary institutions if the public schools could get all students *college ready*.

Test prep and college prep too often occurred without much understanding by schools of the needs for working and living in the rural region. This kind of public education promised earning a bachelor's degree was the best choice for getting out of the rural area—thus reinforcing the rural brain drain concept. As Biddle and Hall (2017) note: "The result is that instead of providing a pathway for youths to go out of their communities and potentially return with a knowledge base of new experiences, rural public schools have simply become engines of exodus, educating students for labor markets and communities located elsewhere."

In reality, believing that somehow those that remained in the local rural area were served well enough by public education contributed in part to the *hollowing out the middle* in rural America (Carr & Kefalas, 2009). Education reform and its focus on efficiency seemed to mirror the effects of devastating decline in local rural communities brought on by 20th Century reforms in agriculture (Butler, 2014).

More recognized by the American public today, the vast majority of good paying manufacturing jobs in rural areas moved overseas for cheaper labor costs. Many agricultural jobs were replaced by technology advancements. Natural resource jobs (e.g., coal mining, forestry) were displaced by more environmentally-friendly energy sources and technology advancements. Cheaper immigrant workers fulfilled labor jobs, particularly in agriculture and construction industries. The remaining low-pay service jobs (e.g., tourism related) reinforced rural residents' status as the *working poor*. Analyses of the 2016 Presidential election have heightened awareness

of rural America's needs as an equity issue and revealed realities that threaten to divide our republic and democratic form of government if unaddressed (Hendrickson, Muro, & Galston, 2018).

Role of ESAs (Now or Never)

Now the times demand change in education again, but with much more understanding and attention to the needs of rural communities in America. Public reaction to education reform influenced major changes in reauthorization of the NCLB law. The federal Every Student Succeeds Act (ESSA) signed into law on December 10, 2015, returns much more of the decision making to state and local governments. Moreover, the ESSA law mentions the word *rural* 54 times (Brenner, 2016). New opportunities exist for organizations that have supporting the education of rural students as the cornerstone of their mission.

Beginning in the 1950s major school district reorganizations occurred. Many states created Educational Service Agencies (ESAs) specifically to address the capacity limitations and equity concerns in small and rural school districts (Stephens, 1998; Stephens and Keane, 2005). ESAs were promoted as the lifeblood of such districts in providing special education, teacher professional development, and many other services. Stephens and Keane (2005) noted in their seminal book, however, that ESAs were American education's invisible partner.

Perhaps this invisible status is attributed to the limited coverage of ESAs in the education literature. Arguably, inability or unwillingness of ESAs to tell their story has contributed to this invisible status. Stephens (1998) advanced the importance of ESAs and the need for expanded roles in rural school district improvement. And during the NCLB reform era, a vast majority of ESAs provided critical services for small and rural school districts. ESAs have continued to evolve and expand services. Now is the time for ESAs to redefine or reclaim their inherent value as providers of essential services and innovations for public education in rural places.

It may be too late to aid community revitalization in some rural areas (Porter, 2018). Many rural communities face daunting challenges, such as low workforce participation rates, opioid crisis issues, school safety concerns, high food insecurity, child poverty rates, and unprecedented decline and aging of the population. Also impacting student success and community viability are inequities of educational opportunity, inadequate internet access at schools and student homes, and cultural transformation of local communities.

However, it seems highly unlikely that a vast majority of the more than 550 ESAs in 45 states can be invisible as federal, state and local politicians call for solutions to the now exposed and better understood rural realities. ESAs may find they are one of many entities seeking to address these challenges. The heightened attention and call for solutions have stimulated numerous organizations to examine their missions and previous impact on the challenges. Universities, not-for-profits, for-profits, and a host of governmental agencies and religious organizations are increasing efforts to address these issues through collaborative partnerships with school systems—and perhaps with ESAs.

Community leaders and residents are likely to welcome this long overdue attention, with hope that any forthcoming *help* is responsive for living and working in the rural region. ESAs may need to examine their mission statements and determine how services impact local schools that intend to serve both learners and rural communities well.

Intermediate Unit 8 Response

An education service agency, IU8 serves 35 public school districts and five Career and Technical Education Centers in four Appalachian counties of Pennsylvania. In the 2018-19 school year, approximately 50,000 students are enrolled, served by 98 elementary, middle and high school buildings. The largest school district enrolls 7,822 students; the smallest district

enrolls 270 students. The school districts collectively employ almost 4,300 professional employees and 1,100 support personnel.

Figure 1. PA Intermediate Units (N = 29)

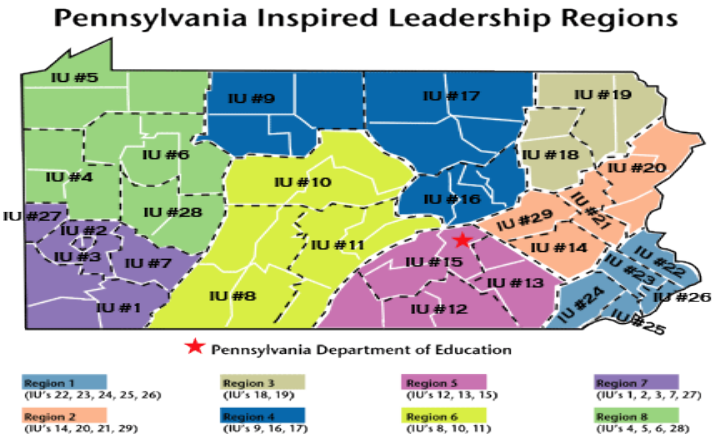
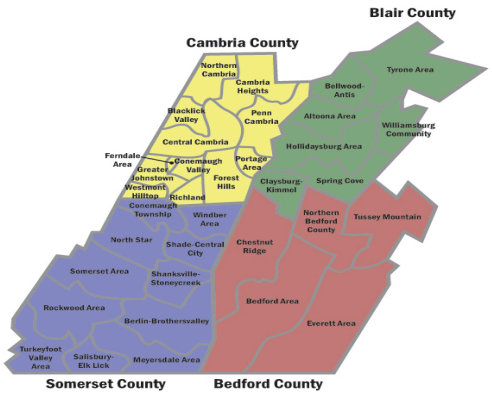


Figure 2. IU8 School Districts (N = 35)



From the 2011-12 school year to 2018-19 period, student enrollment in the 35 districts declined from 52,715 to 49,237 students (-6.6%). All 35 school districts had fewer students in fall 2018 compared to the 2011-12 school year. Over the same period, the number of elementary, middle and high school buildings declined from 111 to 98 (-11.7%).

The vision of Appalachia Intermediate Unit 8 is to inspire people to exceed their dreams. A mission of fostering innovation in learning seeks to create a brand of customized learning solutions that place students at the center of learning. Four core beliefs guide pursuit of this mission:

1. Service: The IU is designed to serve a variety of capacities. IU8 believes its primary obligation is to serve customers—the schools in the region—by reacting to and identifying needs. In concert with this, IU8 believes its role is to lead learning into the mid-21st century.

2. Learning: The IU is a varied delivery mechanism for learning. The core of what happens in any learning environment is this function. Primary to this is adult learning and influencing those that inspire the children.

3. Customization: We believe that, as in all service industries, the future is in customizing in every way and in working with learning agencies in developing means for their customizing of service.

4. Innovation: We believe that innovation, coupled with creativity, imagination and courage, is the foundation of its future success.

Many innovations exist in our local school districts. A need exists to scale solutions with greater value for rural communities and their residents who seek to live and work in the region. In the book *Small-Town America*, Princeton University sociologist, Robert Wuthnow (2013), reminds us a significant population of people in the U.S. want to live and work in small towns and rural areas—and rural residents will explain their reasons if others will listen.
Following the 2016 Presidential election, Wuthnow reflected on visits to hundreds of small towns, farms, and rural communities. For a decade he had studied their histories, collected information on surveys, reviewed election results (including exit polls), examined business statistics, and read municipal reports. He and an assistant conducted more than 1,000 interviews with people across rural America. In a more recent book, *The Left Behind: Decline and Rage in Rural America,* Wuthnow (2018) explains it was much more than economic concerns that rural voters expressed in the election.

Most certainly, rural America is in the national spotlight; policymakers in the nation's capital more fully realize someone lives in the forgotten places of "Flyover Country" (Kendzior, 2018; Loesch, 2016; Reynolds, 2017). Quality public education must mean more than test scores.

Individual student prosperity leads to community viability when the goal of education means more than preparing for a career in an urban place. Rural communities need public education that values those who want to work and make a life there as part of their American Dream, however defined—and ESAs can seize the opportunity to have a more responsive role.

Consequently, IU8 is undertaking the Getting Better Together (GBT) initiative. The initiative seeks to create and institutionalize a *process* whereby the IU and school systems collaborate to scale local innovations that are more learner centered and community focused as mutually beneficial goals of public education in rural places. The process is called CARE, Catalyzing Action for Responsive Education.

Why Learner Centered Education?

Many schools maintain an Industrial Age model of schooling, where barriers of time and space dominate the delivery of public education opportunities students (i.e., learners) receive. Time serves as the governing philosophy of education: time is the constant while learning is the variable. For example, school systems are organized as a place to warehouse learners based on their age—a form of time. Space governs school, in that learning happens almost entirely in the school building.

Much like raw material moves along the factory floor from one station to the next, students move in batches from one class to the next. Bells determine when students (and adults) can move from one place to another. Learning must always be monitored by a state-approved adult who determines whether or not a student has progressed satisfactorily through the approved content. The command and control structure occurs in a specific space (i.e., the factory school) to ensure compliance.

Teachers are overseen by assistant principals (if the school enrollment is large enough to justify such a position). Assistant principals are overseen by principals, who are managed by assistant superintendents or superintendents, who are overseen by the school board. The entire structure of management that rules the school system operates for students and adults to coexist in the educational factory.

In an industrial factory, routine processes are instituted to protect the work against human error or misuse. In education, because routines force people to come to one building to learn, policy dictates use of a scripted curriculum. Teachers commonly follow a prepared script so *bosses* in the system are assured the teaching process (not the learning process) is implemented the way outside experts deem best. In the same way the industrial factory dehumanizes the factory worker, the education factory de-professionalizes the teacher.

Best interests of the child may have been considered, but too often the greater concern is controlling the system to accommodate concerns of the adults. For example, creating a school's master schedule frequently prioritizes the needs of the adults above the learning needs of students. Teachers are placed in the schedule first, and then the learners are incorporated later—the basic definition of an adult-oriented system. Needs of adults are reinforced by pressures in the system for greater test score accountability. These pressures influence everything from the classes and learning experiences of students to the performance evaluations of teachers.

Thus, how the student is stereotyped, labeled and treated by adults—within time and space barriers—serve as an antithesis to what the student needs. In an appropriate educational ecosystem, the learner's needs are at the center of decision making. Otherwise, teachers, parents and administrators waste countless hours in meetings trying to align an outdated (20th Century) industrial model of schooling with the needs of 21st century *learners*.

Facilitated by command and control processes, the industrial model of schooling never worked well for *all* students. Some students learned how to game the system by *playing school*. They figured out the right answers or did just enough to get by. Being compliant and staying out of trouble were the success goals. Many students did not engage as learners in such a system. Basically, the education system found solutions in the 20th Century (during peak industrialization) by sending disengaged students to vocational schools for *training*, creating alternative schools, or pushing students out of the system entirely as *throwaways* not capable of adjusting to the *schooling* environment.

These approaches were considered satisfactory outcomes tolerated by the adults. After all, the disengaged students could still become productive members of society as they moved to jobs in the industrial economy. Today, society and rural communities no longer offer the disengaged, uneducated learners with opportunities for a satisfactory standard of living and productive participation in civic responsibilities.

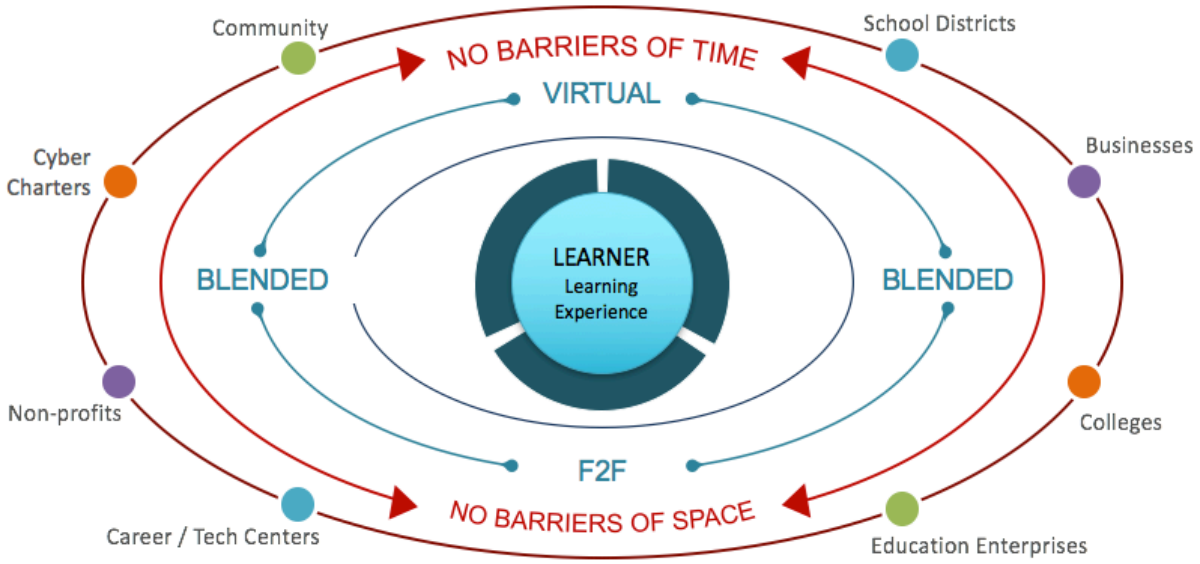
In essence, it is the command and control behavior of adults in the system and the structures of industrial model schooling that must change. This does not mean we must *throw the baby out with the bath water*. But it does mean we must apply modern understanding of why and how people learn to the needs of humans.

For example, Maslow's revised hierarchy of needs (McLeod, 2018), Bloom's Taxonomy (revised) (Wilson, 2016), and Dewey's emphasis on pragmatic learning experiences (Butler & Rearick, 2018) have major implications for the new learning ecosystem. The recent book by the National Academies of Sciences, Engineering, and Medicine (2018), entitled *How People Learn II: Learners, Contexts, and Cultures,* also is highly informative.

Figure 3 illustrates how the new learning ecosystem accommodates modern ways of thinking about what best serves learners in an age of digital learning advancements and customized learning. At the heart of the ecosystem is the learner and the learning experience. Based on needs of the learner, relevant and engaging learning experiences are created. And Weimer (2013) reminds us that learner-centered teaching motivates students by giving them some control over the learning processes.

Radical acts occur when placing the learner and the learning experience at the center of everything the school does. When filtering all decisions based on the learner being at the center, barriers of growth and opportunity for the student fall by the wayside. The learner and the learning experience become the focal points, not the rules and regulations that commonly govern the outdated Industrial Age ecosystem. The school board, administration, and teachers filter all decisions through the lens of learner centeredness.

Figure 3. The New Learning Ecosystem



When educators believe that each individual learner deserves an optimal learning experience, the realm of learning opportunities expand. The *course* will not fit into the master schedule ideology

is eliminated from the decision-making process. Valuable learning experiences become available for all students, rather than available to a few lucky learners (e.g., internship or entrepreneurial experiences). The time barrier also is removed from the learning experience consideration. Time is a variable that adjusts to the needs of each individual learner. Moreover, teachers are empowered as they use their professional knowledge and experience to create meaningful learning experiences that also acknowledge the voice of the leaner.

In the new learning ecosystem, the delivery model of learning becomes multi-faceted. Traditional face-to-face (f2f) learning may remain as an important (and viable) learning method, but not the only learning method. Also possible, the delivery method may be 100% in a virtual format, as the learner engages in online learning experiences. This should not mean, however, that the learner must always complete the online learning experience entirely alone, eliminating interaction with adults and other learners. The learner may frequently interact with the teacher(s) and other learners through virtual meetings.

As with the face-to-face learning method, 100% virtual learning, when done in moderation, is a valid modality of learning. The amount of time a learner spends in this modality will depend on the individual's learning modality preference, the learning goal, and how the learning experience is crafted. What needs to be remembered is that "people learn better when they are aware of and direct their own learning and when they engage in learning activities that pose a challenge" (National Academies of Sciences, 2018, p. 148).

Blended learning, a combination of face-to-face and virtual learning delivery modalities, may be more realistic for many learners (Brodersen & Melluso, 2017). As teachers create learning experiences that expand beyond the reach of the typical classroom, learning objectives and learner needs guide the decision of appropriate face-to-face and virtual learning modalities.

The blended approach makes outstanding learning experiences possible—and from a variety of providers inside and outside of the school building. As the learner and necessary learning experiences take center stage, the teacher becomes a facilitator of learning, rather than a person who transmits information to students.

Why Community Focused Learning?

Learning experiences that engage the learner can achieve mutually beneficial goals for learners, schools, and rural communities. Three highly important benefits for 21st century education include:

1. Connects the learning experience to living in a rural community context,
2. Expands social capital opportunities for learners (i.e., social relations that have productive benefits for learners, rural places, and civil society), and
3. Advances the role of public education in sustainable rural development (i.e., economic, ecologic/environmental, and social equity purposes).

The lived experiences and cultures of students in the rural context matter. They form the foundation of understanding for creating customized learning experiences. Without this understanding as a filter for interpreting Maslow's revised hierarchy of needs, Bloom's Taxonomy (revised), and Dewey's emphasis on pragmatic learning by doing, we can easily perpetuate the one-best-way approach to addressing needs of learners—the opposite of customized and personalized learning.

Conclusions of the National Academies of Sciences (2018) emphasize the learner's personal goals, beliefs and values, and social and cultural context are important factors if the learner is to succeed, value learning, persist at challenging tasks, and perform well. Moreover,

Pink (2009) points out that doing our best work is largely an intrinsic motivation that requires three elements: purpose, autonomy, and mastery.

Community focused learning increases social capital, a critical element for understanding the development of rural youth and rural places (Brown & Schafft, 2011; Brown & Swanson, 2003; Carr & Kefalas, 2009; Schafft & Jackson, 2010). Moreover, education plays an important role in the promotion of economic and social vitality of rural America (Beaulieu & Gibbs, 2005). Certain social capital factors are more common in rural communities that are leading the way in helping young people climb the income ladder, one of which is a sense of shared fate and deep commitment to sustaining the community (McKeag et al., 2018).

Cervone (2017) argues that rather than serve capital as a site of resource extraction and low wage labor, education can provide rural youth with the knowledge in which to produce rural spaces that represent what a modern rural community should be, focusing on improving the quality of life for residents. This type of education, Cervone argues, should lead to the development of rural youth who can critically examine their place and the place of rural communities in the world.

More than 20 years ago Miller (1995) summarized the literature on the value of rural schools in community development. Rural schools and their communities were critically linked (Stern, 1994). But too many schools today could be providing the ironic *learning to leave* education discovered by Corbett (2007). In turn, this may be compounded by what Carr and Kefalas (2009) found as contributing to *hollowing out the middle* of rural America—and the rural brain drain phenomenon. Carr and Kefalas found educators took great pride in the "Achievers" who attained education and career status elsewhere. Perhaps unknowingly, however, the

underinvestment in the education of the “stayers” left them unprepared for living and working in a rapidly changing local rural context.

More recently, Schafft (2016) reminds us of the need to rethink policy issues and implications regarding the role of rural schools in community development. And rural school leadership for collaborative community development is an important role of public schools (Harmon & Schafft, 2009; Schafft & Harmon, 2010). Public education must become more focused on sustainability and human well-being (Cook, 2019). Greater attention is necessary on key changes in rural economies, communities, and quality of life issues (Bailey, Jensen & Ransom, 2014). IU8 is pursuing this concern with creation of the Catalyzing Action for Responsive Education (CARE) process in the Getting Better Together (GBT) initiative.

GBT and CARE Process

Schools in the region serve rural communities that are struggling to re-create economies, provide quality health care, improve the environment, bridge cultural transitions, fully participate in the digital world, and engage all citizens as equal participants. These issues are central to the premise of education for sustainable development that helps create a place that is ecologically sound, socially just, and economically viable. The communities need schools to provide educational opportunities for students that help create such a place.

The core focus of the GBT initiative is to help school districts work together to make promising policies, programs, and practices more learner centered and community focused. This will give schools more viable roles in rural development efforts of their communities, while at the same time give all learners valuable experiences for living and working in the region, if they desire.

Rural education for sustainable development is an unlikely vision in school systems with a focus on test scores only. The ESSA law, however, gives educators a window of opportunity. Afforded more state and local decision-making authority, local school districts can now make learning opportunities more learned centered and community focused—the kind of rural education that can help learners and communities better prepare for the future.

Consequently, IU8 started the GBT initiative to serve as a catalyst during this time of opportunity and great need. It is attracting national and international attention. The authors conducted a session on GBT at the 2018 Association of Educational Service Agencies (AESA) conference, the national meeting of organizations like IU8. The authors also presented the initiative at the 2018 International Symposium on Innovation in Rural Education (IS FIRE) in Montana. IS FIRE was co-hosted by the Center for Research on Rural Education at Montana State University and by the National Centre of Science, Information and Communication Technology, and Mathematics Education for Rural and Regional Australia (SiMERR) located at the University of New England in Australia.

CARE Process

GBT is an assets-based approach, focusing on innovations that local districts are evolving with some success in meeting needs of learners. IU8 seeks to collaborate with the districts in making them better and bringing them to scale in the region. Central to the GBT initiative is the Catalyzing Action for Responsive Education (CARE) process that includes four steps: (1) discovery, (2) capacity building, (3) intentional place-based innovation design, and (4) success assurance.

Step 1: Discovery

The first step in the CARE process is *Discovery*. IU8's executive director invites the district superintendent and others selected by the superintendent to participate in a half-day activity-oriented Discovery Event. The event has two objectives: (1) to provide an overview of the GBT initiative, and (2) to identify signature innovations in member districts.

Following the welcome and orientation, IU8 leadership explains the GBT initiative. Also, the executive director of the National Rural Education Association (NREA) joins the meeting live via video conference technology to explain the potential importance of GBT to other school districts across rural America and to participate in Q&A with audience members.

Interactive sessions follow, organized as team talk, table talk, and group talk. Key IU8 staff facilitate the team and table talk sessions. A *discovery guide* is used to focus the *talk* sessions. Guiding questions include:

1. What is the name of the innovation?
2. Is the innovation a policy, program, or practice?
3. Why is the innovation being implemented?
4. How is the innovation learner centered?
5. How does the innovation foster positive school *and* rural community benefits?
6. What evidence supports the innovation is achieving its intended results or holds promise to do so?
7. Where is the innovation being implemented in the IU8 region (Name of District(s) and school(s))?
8. Who is most knowledgeable about the innovation in IU8 and in the school districts?

Each district team records answers on flip chart paper and posts the chart paper on the wall in the room. Audience members are asked to rotate around the room and review the charts. During this time, team members also can make additions or corrections to their posted chart. Then the IU8 executive director facilitates a room group talk session that includes (1) a spokesperson who summarizes the team's posted innovation(s) for the event audience, and (2) school district leaders who ask questions about innovations posted that may be relevant in their schools.

The Discovery Event ends with a panel of superintendents, facilitated by the IU8 executive director, answering the question: What did I learn today? Next steps in the CARE process are also highlighted by IU8's executive director.

IU8 staff members retrieve the team charts from the walls. Information on the charts is transferred to an Excel database for use in determining promising innovations as good candidates for making them better—more learner centered and community focused—in next steps of the CARE process. Soon after the Discovery Event, however, the IU8 executive director sends a summary document of event results to superintendents of each district participating in the event.

Superintendents of all other IU8 member districts also receive the document to help promote interest in the GBT effort. IU8 staff may then visit with superintendents (and team) of additional districts that express interest in sharing their innovations and in completing a discovery guide chart. This information is then added to the IU8 innovations database.

The discovery step continues as key IU8 leadership review the database information to determine which signature innovations would be good candidates for using the CARE process to scale the innovation to more school districts in the IU8 region. Four criteria guide the review:

(1) Extent multiple districts are innovating solutions to a similar educational challenge in their specific rural context. The higher the rating the greater the potential need by schools and or potential impact on student learning opportunities in region.

(2) Likelihood school district(s) leaders using the innovation would/could partner with IU8 to make their innovation better with evidence. The higher the rating the greater the chance the CARE process could produce multiple innovations successfully as solutions for use by other school districts. The intent is more contextually relevant solutions to a challenge, rather than a *one-size-fits-all* model innovation.

(3) Scale-up potential of the multiple innovations for the educational challenge in a majority of school districts in the IU service area. A high rating means a majority of school districts in IU8 region would want to implement one of the solutions as a *fit* for their rural context.

(4) Capacity for scaling innovation. A high rating means that the IU and school districts designing the multiple solutions in the CARE process could collaborate to provide professional development and technical assistance to other districts.

The discovery step may also include an out-of-region *promising innovation*. Such an innovation must be identified by IU staff or school district leadership as emerging in an out-of-IU8 member school district that holds potential to address a critical need among schools in the IU service area. At least two school districts in the IU8 service area must be committed to trying the innovation in their school district as an IU8 collaborator in the CARE process. The innovation must also receive an acceptable potential scale-up rating by the IU8 GBT leadership team.

As a final action in the discovery step, IU8 leadership team members reflect on the ratings and consider capacity limitations of the IU and needs required to support the CARE process. The result is a list of high priority topics for which multiple school districts are innovating solutions as feasible for step 2 in the CARE process.

For example, more than 35 innovations were posted by the 17 school districts in attendance at the June 18, 2018 Discovery Event. Table 1 shows seven example innovations and their root causes expressed by school district teams. This example listing suggests that three of the innovations are solutions to a broader educational challenge related to technology implementation. Two innovations appear designed as solutions to the educational challenge of student preparation for the workplace.

Table 1. District Innovations Evolving as Solutions for Root Causes of Educational Challenges

Innovation	Root Cause
Appreciative Leadership	Inconsistent (unsolid) district leadership culture
Let's Talk	Student sexual abuse and mental health issues
Blended Learning	Insufficient classes, small staff and money
Learning Pathways	Inadequate amount and staff use of technology
High School 1:1 Tech. Initiative	Inability of instruction to teach and reach students where they are
Career Prep Concept	Students without real-world work experience
Work Mentor Program	Students perceive no opportunities to stay in local community

Step 2: Capacity Building

Building collaboration capacity with school districts on a selected high priority educational challenge topic drives Step 2 in the CARE process. First, IU8 leadership determines the organization's internal strengths and weaknesses in human and fiscal capacity to successfully innovate solutions consistent with the school districts' root causes.

Second, IU leadership meet with leadership of school districts to explore capacity and commitment to make the innovation better (i.e., learner center and community focused) for use by their own schools and other schools in the IU service area. This includes a willingness to designate a team and lead advocate to collaborate with the IU and other school districts as part of a learning network and CARE process.

Strengths and weaknesses in capacity of the school district to participate in collecting, using and sharing qualitative information and quantitative data are determined. Also explored is the willingness of the school district to provide leadership with the IU in training leaders in other school districts to implement the innovation. This assessment of strengths and weaknesses in capacity focuses the IU's understanding of resources and collaborators required to support both the IU and interested school districts in scaling up the innovation to all interested school districts in the IU service area.

As the third and final consideration, IU leadership develops a budget for producing the set of innovations on the topical area represented by collaborating school districts. Needs of both the IU and collaborators are considered. If necessary, this includes identifying opportunities to attract funding and or additional external expertise necessary to support Steps 3 and 4 of the CARE process.

Step 3: Intentional Place-Based Design of Innovation

Making the innovations on the educational challenge topic "better" means using design thinking and improvement science techniques in a rapid prototyping process to improve likelihood of implementation. Better also means the innovation can be implemented in a *place like mine*, with expectations that intended results can be achieved. Otherwise, sustainability of

the innovation is highly unlikely, recognized as simply another failed good idea that could not be implemented with fidelity and success in *my school and community*.

The primary goal of the CARE process is to facilitate action that brings to scale a variety of solutions (i.e., contextual innovations) that are responsive to the needs of schools in the IU8 service area. Existing policies, programs, and practices in the region are leveraged that could enhance learner-centered education for students, while also contributing to community development needs. The design process is intentional in leveraging existing strengths of the rural schools of the region, rather than perceiving place as in need of a model to fix education in the rural school settings.

Each school district team brings its experiences into Step 3 of the CARE process. The district enters its solution into the mix of solutions to the common educational challenge. As a learning network, all districts seek to make their respective solutions better in a rapid improvement process. IU8 staff facilitate discussion among network members virtually. This is to enable all network participants to clearly understand *how* and *why* each solution is implemented in the respective school district. Network facilitation (face-to-face and virtual) then enables members to provide feedback for making each innovation more learner-centered and community-focused. IU8 also enhances the learner centered and community focused discussion with supplemental readings, research results, and experiences of others in the state and nation.

Consequently, each school district in the network considers the feedback as it makes refinements for continued use of its prototype solution in the local school. This is considered an incubation period—the time when a district is trying new ideas generated from the network. IU8 also facilitates collection of implementation and outcome information. During this incubation

period IU8 staff continues to facilitate sharing of evolving information and experiences among network participants.

This rapid prototyping of each school district's solution in a place like mine is also informed by what is being learned by others in design-based implementation research (DBIR) and improvement science (Bevan & Penuel, 2018; Bryk, 2015; Bryk, et al., 2015; Fox, et al., 2017; LeMahieu, Nordstrum, & Potvin, 2017; Reardon & Leonard, 2018). In step 3 of the IU8 CARE process, it is the rural context that is critically important.

Each district's innovation remains in this *incubation period* until the network is satisfied with understanding *why* and *how* the innovation works. This includes the network determining what adaptations are feasible for its use as a solution to the common educational challenge. Thus, a set of innovations evolve from the learning network, each understood to have value in a certain rural context for districts in the IU8 region.

Step 4: Success Assurance

In Step 4, school districts in the learning network agree to continue the network for two years to support scale-up of the innovation in IU8 member school districts. They continue to collect data and share information as evidence on the way the solution is impacting their schools and communities. During this period they also collaborate with IU8 to assist in producing a web-based how-to manual and videos as training supports for scale-up.

In addition, each school system commits a member of the innovation team as the lead advocate *for their way* of implementing the innovation. This person has responsibility to share knowledge of the innovation with those in other school districts interested in implementing the innovation. The lead advocate (and perhaps other members of the district team) also share their experiences in a scale-up innovation institute conducted by IU8. This institute is a blend of a

face-to-face event and follow-up technical assistance webinars designed to help other interested school districts implement an innovation.

IU8 also promotes each school district as a demonstration site for implementing the innovation in a *place like mine*. IU8 continues facilitating the learning network as it expands to other school district (teams) who seek to implement one of the innovated solutions. Thus, it is the power of the network and learning together that enables each innovation to get better— and continuously improve impact of the innovation for learners, schools, and communities of IU8 member school districts.

Last, IU8 seeks to establish an Innovator's Academy for persons who gain competencies and field-based experiences as a lead innovator advocate. A micro-credential program is being created to document and recognize such expertise of individuals in the IU8 school districts. The IU will provide ongoing technical assistance of these persons.

Future Directions

IU8 is in the early stages of the GBT initiative. Following the June 13, 2018 Discovery Event, seven school districts (one outside the IU8 service area) agreed to participate in a learning network and make their innovations better using the CARE process. Each district innovation is related to the educational challenge of supporting the entrepreneurial ecosystem in their communities. By the end of summer 2019, IU8 leadership anticipates accomplishing the following:

1. Teams in each of the seven school districts able to clearly explain essential elements of its innovation, how it is learner centered, and why it holds potential for contributing to the entrepreneurial ecosystem of its community.

2. Members of all district teams in the learning network able to reflect on their experiences with their related innovation, synthesize supplemental information provided by IU8, and offer feedback for making each district's innovated solution better.

3. A better prototype of each solution ready for use in the 2019-2020 school year.

4. Capacity for the IU and school districts to collect, analyze, and use information in the network to inform decisions during the incubation period.

5. Cultivation of collaborations with other ESAs and organizations that can advance the CARE process, efforts that began with presentations at the Association of Educational Service Agencies (AESA) annual conference in Colorado and the International Symposium for Innovation in Rural Education (IS FIRE) in Montana.

Across much of rural America, public education must become more connected to local civic and community-economic development efforts. It must help students (learners) gain the kind of learning experiences that support their choice to live and work in the rural region where they grew up. Education for sustainability must mean more than gaining a job. Human well-being requires having the ability to contribute to the economic, social/cultural, and environmental qualities of life in a place. Education must become more learner centered and community focused in our rural region. IU8 aims to help school system leaders and teachers who want to achieve this ambitious goal.

References

Bailey, C, Jensen, L., & Ransom, E. (2014). *Rural America in a globalizing world: Problems and prospects for the 2010s*. Morgantown, WV: West Virginia University Press.

Beaulieu, L. J., & Gibbs, R. (Eds.). (2005). *The role of education: Promoting the economic and social vitality of rural America* (pp. 6-9). A special report issued by the Southern Rural Development Center, in partnership with the USDA Economic Research Service and the Rural School and Community Trust. Retrieved from http://www.ruraledu.org/user_uploads/file/role_of_education.pdf.

Bevan, B., & Penuel, W. R. (Eds.). (2018). *Connecting research and practice for educational improvement: Ethnical and equitable approaches*. New York, NY: Routledge.

Biddle, C., & Hall, D. (2017). How education is failing rural America. *Education Week,* 36(18). Retrieved from http://www.edweek.org/ew/articles/2017/01/18/how-education-is-failing-rural-america.html

Brenner, D. (2016). Rural educator policy brief: Rural education and the every student succeeds act. *The Rural Educator,37*(2), 23-27. Retrieved from http://epubs.library.msstate.edu/index.php/ruraleducator/article/view/336

Brown, D.L., & Schafft, K. A. (2011). Rural people & communities in the 21st century: Resilience & transformation. Cambridge CB2 1UR, UK: Polity Press.

Brown, D.L., & Swanson, L.E. (2003). Challenges for rural American in the twenty-first century. University Park, PA: The Pennsylvania State University Press.

Brodersen, R. M., & Melluso, D. (2017). *Summary of research on online and blended learning programs that offer differentiated learning options* (REL 2017–228). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from https://files.eric.ed.gov/fulltext/ED572935.pdf

Bryk, A. S. (2015). doi: 10.3102/0013189X15621543, 44(9), 467–477. Retrieved from https://doi.org/10.3102/0013189X15621543

Bryk, A. S., Gomez, L., Grunow, A., & LeMahieu, P. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Educational Publishing.

Butler, T. (2014). School leadership in the 21st century: Leading in the age of reform. *Peabody Journal of Education, 89*, 593-602.

Butler, T., & Rearick, D. (2018). *Dewey: A reflection on the inevitable: Transforming 21st century learning through experience and education*. Chambersburg, PA: eGenCo.

Carr, P. J., & Kefalas, M. J. (2009). Hollowing out the middle: The rural brain drain and what it means for America. Boston, MA: Beacon Press.

Cervone, J. A. (2017). The reproduction of rural spaces through education: Abstraction of the rural and the creation of new differential spaces. *Policy Futures in Education, 15*(4), 427-440.

Cook, J. W. (Editor). (2019). *Sustainability, human well-being and the future of education*. New York: Palgrave Macmillian.

Corbett, M. J. (2007). *Learning to leave: The irony of schooling in a coastal community*. Black Point, Nova Scotia: Fernwood Publishing Co., Ltd.

Fox, T.; Friedrich, L., Harmon, H., McKithen, C., Phillips, A., Savell, S., Schaefer, V., & Silva, M. (September 2017). *Leading education innovations in rural schools: Reflections from i3 grantees*. Investing in Innovation Fund (i3), US Department of Education. [This report was produced by the i3 Improving Rural Achievement Community.] Retrieved from https://files.eric.ed.gov/fulltext/ED577124.pdf

Harmon, H. L., & Schafft. K. A. (2009). Rural school leadership for collaborative community development. *The Rural Educator, 30*(3), 4-9.

Harmon, H. L., & Smith, K. C. (2012). L*egacy of the rural systemic initiatives: Innovation, leadership, teacher development, and lessons learned*. Charleston, WV: Edvantia, Inc. Retrieved from https://files.eric.ed.gov/fulltext/ED531890.pdf

Hendrickson, C., Muro, M., & Galston, W. A. (November, 2018). *Countering the geography of discontent: Strategies for left-behind places*. Washington, DC: The Brookings Institution. Retrieved from https://www.brookings.edu/research/countering-the-geography-of-discontent-strategies-for-left-behind-places/

Hudson, L. (November 2013). Data point: Trends in cte coursetaking (NCES 2014-901). Washington, DC: U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. https://nces.ed.gov/pubs2014/2014901.pdf

Kendzior, S. (2018). *The view from flyover country: Dispatches from the forgotten America*. New York: Flatiron Books (A division of Macmillan).

LeMahieu, P. G., Nordstrum, L. E., & Potvin, A. S. (2017). Design-based implementation research. *Quality Assurance in Education, 25*(1), 26-42, https://doi.org/10.1108/QAE-11-2016-0077

Loesch, D. (2016). *Flyover nation: You can't run a country you've never been to*. New York: NY: Sentinel (imprint of Penguin Random House, LLC).

McKeag, M., Soskis, M., Ramos, L., & Breen, B. (November 2018). S*ocial mobility in rural America: Insights from communities whose young people are climbing the income ladder*. National 4-H Council and The Bridgespan Group. Retrieved from

https://www.bridgespan.org/bridgespan/Images/articles/social-mobility-in-rural-america/social-mobility-in-rural-america.pdf

McLeod, S. A. (2018, May 21). *Maslow's hierarchy of needs*. Retrieved from https://www.simplypsychology.org/maslow.html

Miller, B. A. (1995). The role of rural schools in community development: Policy issues and implications. *Journal of Research in Rural Education, 11*(3), 163-72.

National Academies of Sciences, Engineering, and Medicine. (2018). *How People Learn II: Learners, Contexts, and Cultures*. Washington, DC: The National Academies Press. doi: https://doi.org/10.17226/24783.

Pink, D. (2009). *Drive: The surprising truth about what motivates us*. New York, NY: Riverhead Books (imprint of Penguin Random House LLC).

Porter, G. (2018, December 14). "The hard truths of trying to 'save' the rural economy." *The New York Times*, Sunday Review. Retrieved from https://www.nytimes.com/interactive/2018/12/14/opinion/rural-america-trump-decline.html

Reardon, R. M., & Leonard, J. (Eds.). (2018). *Innovation and implementation in rural places: School-university-community collaboration in education*. Charlotte, NC: Information Age Publishing, Inc.

Reynolds, W. M. (Ed.). (2017). *Forgotten places: Critical studies in rural education*. New York: Peter Lang Publishing, Inc.

Schafft, K. A. (2016). Rural education as rural development: Understanding the rural school-community well-being linkage in a 21st-century policy context. *Peabody Journal of Education, 91*(2), 137-154.

Schafft, K. A., & Harmon, H. L. (2010). Schools and community development. In J. W. Robinson, Jr., & G. P. Green (Eds.). *Introduction to community development: Theory, practice, and service learning,* pp. 245-259. Thousand Oaks, CA: SAGE Publications, Inc.

Schafft, K. A., & Jackson, A. Y. (Eds.). (2010). Rural education for the twenty-first century: Identify, place, and community in a globalizing world. University Park, PA: The Pennsylvania State University Press.

Stern, J. (June, 1994). The condition of education in rural schools. Washington, DC: United Stated Department of Education, Office of Educational Research and Improvement. Retrieved from http://files.eric.ed.gov/fulltext/ED371935.pdf

Stephens, E. R. (1998). *Expanding the vision: New roles for educational service agencies in rural school district improvement*. Charleston, WV: AEL, Inc., The Rural Center. Retrieved from https://files.eric.ed.gov/fulltext/ED418822.pdf

Stephens, E. R., & Keane, W. G. (2005). *The educational service agency: American education's invisible partner*. Lanham, MD: University Press of America, Inc.

Symonds, W. C., Schwartz, R. B., & Ferguson, R. (2011). *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century*. Pathways to Prosperity Project, Harvard Graduate School of Education. Retrieved from https://www.gse.harvard.edu/sites/default/files/documents/Pathways_to_Prosperity_Feb2011-1.pdf

Weimer, M. (2013). *Learner-centered teaching: Five key changes to practice* (Second edition). San Francisco, CA: Jossey-Bass Publishers.

Wilson, L. O. (2016). Anderson and Krathwohl Bloom's Taxonomy Revised: Understanding the new version of Bloom's taxonomy. Retrieved from https://quincycollege.edu/content/uploads/Anderson-and-Krathwohl_Revised-Blooms-Taxonomy.pdf

Wuthnow, R. (2013). *Small-town America: Finding community, shaping the future*. Princeton, NJ: Princeton University Press.

Wuthnow, R. (2018). *The left behind: decline and rage in rural America*. Princeton, NJ: Princeton University Press.

Zuckerman, S.J., Campbell Wilcox, K., Schiller, K.S., & Durand, F.T. (2018). Absorptive capacity in rural schools: Bending not breaking during disruptive innovation implementation. In E. McHenry-Sorber & D. Hall (Eds.), The diversity of rural educational leadership [Special issue]. *Journal of Research in Rural Education, 34*(3), 1-27. Retrieved from http://jrre.psu.edu/wp-content/uploads/2018/03/34-3.pdf

Hobart Harmon, PhD, is Leader of Strategic Advancement at Appalachia Intermediate Unit 8 and Co-Director of the Institute for the Advancement of Research, Innovation, and Practice in Rural Education at the University of Central Florida. Tom Butler, PhD., is Executive Director of Appalachia Intermediate Unit 8 in Altoona, PA. Dr. Harmon can be reached at hharmon@shentel.net. Dr. Butler can be reached at TButler@iu08.org.