In-the-Moment Experiences of Rural School Principals in the COVID-19 Pandemic

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The COVID-19 pandemic has exposed the many existing inequalities in education systems across the world. Not all children have easy access to educational online resources or digital technologies, a situation more amplified in rural contexts where access, connectivity and affordability play a significant factor. This qualitative account reveals examples of how rural school leaders were able to find innovative ways early in the COVID-19 pandemic to address the remote learning needs of their students and families. This paper shares in-the-moment experiences of rural principals, and those who supported them, in quickly transitioning to address student needs when school buildings closed. Support actions of regional and state education agencies are also described. Principals' schools are located in rural areas of Kansas, Pennsylvania and Queensland, Australia. Principals' attention to place and teacher capacity enabled students and families to access educational offerings and supports in new ways.

Schooling in the global pandemic

2020 was arguably a year like no other, for schools all over the world. In particular, the early phase of the pandemic and first wave lockdowns March-July caused radical and perhaps long-lasting changes to leading and teaching in rural schools. By mid-March, governments in 113 countries had closed educational institutions. Over 100 countries had implemented nationwide closures, impacting nearly 850 million children and youth (Barrington, 2020). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), by the end of March 2020 more than 1.5 billion pupils or 87% of the world's student population across 165 countries had been affected by school closures caused by COVID-19 (Sacks et al., 2021, as cited in UNESCO, 2020). One year into the COVID-19 pandemic, close to half the world's students were still affected by partial or full school closures, and over 100 million additional children had fallen below the minimum proficiency level in reading as a result of the health crisis (Barrington, 2020).

Never before has there been such an international mandated imperative to close schools and yet continue learning and teaching activities. This 'remote learning' imperative occurred at different stages of the school cycle in the United States and Australia, two countries with many differences but in relation to rural education, many similarities. Both have experienced population decline in many nonmetropolitan areas shaped by global economic and technological shifts, increased population mobility, the globalization of production, limited rural labor market demand, selective rural outmigration, and aging rural populations (White, 2021). These demographic changes have had serious consequences for the survival of rural schools, as often enrolments decline and schools face pressure to close or consolidate (Tieken & Auldridge-Reveles, 2019). Both countries also share similar challenges in staffing (both recruiting and retaining) rural schools and rural students often experience generally less opportunities for further education and career opportunities.

While the two contexts differ, in relation to rural education, there is merit in exploring and sharing strategies that work in rural education. A previous study exploring rural education in the US and Australia (Mitchell et al., 2019) focused on sharing institutional responses to pre-service teachers' experiences in rural preparation. This paper builds on such a global comparative work to share insights for rural school leaders to benefit the field. As they noted:

> The field is in need of additional examination regarding what it means to be a teacher in a rural place that is fully situated within the socio-political realm of its state, country, and educational system (Biddle & Azano, 2016) (p.20).

For many schools in Australia and the United States, principals and teachers were given only one or two weeks to create new hybrid forms of

teaching and prepare for remote learning. In Australia, K-12 schools experienced interruptions in every state and territory, although the extent and period of closures varied significantly across jurisdictions (Sacks et al., 2020). The call to change came with a growing realization of the importance of meeting a widening diversity of student and family needs. Government directives to close schools in the Australian context came regardless of where the school was located and, like many education directives, were largely metro-centric in focus. Many rural communities had experienced no cases of the virus, but there were fears for vulnerable remote groups. For example, in the Australian context, many Aboriginal and Torres Strait Islander communities were put into strict lockdown with children required to return from boarding schools to their home communities where sometimes little infrastructure existed in the local schools or their homes for online learning.

Though major metropolitan cities first became the focal point of the COVID-19 outbreak in the United States, the virus spread to every state and inhabited county. In per capita terms, cumulative COVID-19 cases were greater in metro than in nonmetro (rural) areas until late October 2020, when cumulative per capita COVID-19 cases in rural areas exceeded cases in metro areas. By mid-April 2021, the prevalence of cumulative COVID-19 cases was very similar in metro and nonmetro areas (Pender, 2021).

Soon after the call for school closures, U.S. educational leaders faced numerous challenges, including parents with questions about remote and online learning opportunities; effects of school closures on student attendance requirements, assessment practices and student report cards; and graduation requirements for seniors in high school (Barrington, 2020). Principals soon became the *caregiver of all* (Anderson et al., 2020). Leading in a crisis became the new normal as school leaders confronted pressing issues of instructional responses; challenges for students, families, and teachers; policies for crisis management; inequities exposed by the pandemic; and strategies for self-care and well-being of others (CPRE, 2020). Reporting on a CPRE study of 120 principals' COVID-19 experiences in 19 states, Superville (2020) noted:

> The in-the-moment research revealed glaring inequities and varied district approaches. Some gave principals broad autonomy to make decisions related to the pandemic response, while others took a top-down centralized approach that constrained school leaders. Others balanced the two approaches. (par. 5)

In Australia, Sacks et al., (2021) note that school-led remote learning is not a new concept. The 'School of the Air' as an example, is a long-standing program of delivering remote learning to children located on large outback cattle stations. However, COVID-19 resulted in a different form of school-led remote learning with challenges, such as reduced one-to-one engagement with teachers; difficulty in student engagement; less ability to monitor individual student progress; increased oversight required from parents and caregivers, particularly for younger children; increased social isolation and reduced ability to support student well-being; interruption to learning support for those children with additional needs; and different levels of access to technology, including internet and devices that support learning (Sahlberg, 2020).

This paper describes how four rural school principals in Australia and four in the United States (two of which also district superintendent), with supports of state and regional officials, used their resilience and keen knowledge of the various assets and affordances of their *place* to ensure the learning and well-being of all students and staff. As Price (2014, p. 241) notes: "Important elements of resilience are the capacity to self-organize, learn, adapt and cope with nonlinearities and uncertainties." Principal actions early in the pandemic to build opportunities for future resilience contribute important understanding of '*ruraling* school leadership' (Roberts & Fuqua, 2021).

Valuing Rural Social Space in Researching School Leaders

Leadership happens within a particular *place* or *space*, meaning within layered and interconnected geographic and cultural contexts of school and community. Traditional models of leadership are generally not attentive to culture, context or place (English, 2005; Howley & Howley, 2007; Ryan, 2005), and can be problematic for that reason—particularly in rural settings where place embodies a *land ethic* (Leopold, 1949) and where the legitimate authority of leaders (Weber, 1924/1968) is entwined with the unique history and culture of the community (Johnson, Hess, Larson, & Wise, 2010; Johnson, Shope, & Roush, 2009). Rural communities face many of the same challenges as their urban and suburban counterparts. These challenges, however, often manifest in subtly different ways that render one-size-fits-all strategies ineffective and even harmful (Johnson & Howley, 2015). Successful leaders of rural schools harness the potential in

assets and affordances that exist within their contexts (cf. Johnson, Thompson, & Naugle, 2009).

Rural schools have often been described as the heart of a rural community (Halsey, 2018). By extension then a rural school's principal could be viewed as responsible not only for the learning and well-being of students, but also for the well-being of families and the community itself. In the *International Rural School Leadership Project*, the authors of this paper collaborated to facilitate ZOOM forums for two panels of rural school principals to share early experiences in the pandemic with colleagues in each other's country. This approach was taken to enable rural leaders from both countries to share and learn from each other. For this paper, we analyze the ZOOM-recorded interviews in the project's database and draw on the work of Downes et al., (2021) to take an ethical standpoint in exploring school leadership that values *rurality*. Downes et al., (2021) note:

> Informing our view that valuing rurality is an ethical issue is the growing concern in the rural education community about how we ensure that the rural is appropriately valued in education and education research. This has involved consideration and exploration of how we ensure that the rural is recognised as more than just a physical location determined by distance from metropolitan places. (p. 265)

We specifically explored the question of what are the early challenges and successes of rural school leaders through the COVID-19 pandemic?

Methodology

We draw on advantages of an *in-the-moment* research approach and an experience-sampling method (ESM) that enabled us to learn about individuals' lives in context. As Zirkel et al. (2015, p. 7) note: "The focus of much ESM was and remains understanding individual subjective experience as it is happening." Common in business market research, Morton (2020) explains:

> In-the-moment research is an effective way of capturing people's authentic opinions, attitudes and preferences. It's an approach that puts you right in the moment of the experience—and delivers more accurate insights in the process. With the ubiquity of smartphones and the rise of mobile research, it has never been easier to capture both qualitative and quantitative feedback in real-time. (p 1)

Research shows human memory is not very reliable (Daley, 2018), especially in emotion-charged circumstances (Bessette-Symons, 2018). A key benefit of in-the-moment research is that it reduces recall bias, as respondents answer questions while they are in the midst of the experience. ESM offers proximity to participants' experience and the ability to study intra-individual change and processes, placing thoughts, feelings, and behaviors in highly specific contexts (Zirkel et al., 2015). Recorded ZOOM interview sessions with a sample of purposely selected participants provided the extant database from which we synthesize and describe the lived experiences of principals and other key support officials in addressing early challenges of COVID-19 in their rural contexts.

Table 1
Characteristics of participants

	State/Country	Position	Years in Education	Years in Current Role
Kevin	Kansas/US	Principal	25	14
Amy	Kansas/US	Principal	27	23
Randy	Kansas/US	State Education Commissioner	40	6
Joseph	US/Pennsylvania	Principal and Superintendent	30	12
Nicole	US/Pennsylvania	Superintendent	15	2
Tom	US/Pennsylvania	Intermediate Unit Executive director	28	8
Theresa (Terri)	Queensland	P-10 Principal	26	3
Felicity	Queensland	P-10 Principal	19	4
Adrian	Queensland	P-12 Principal	23	2
Karen	Queensland	P-12 Principal	33	3 (at current school; 16 as principal)
Peter	Queensland	Deputy Director General	34 years	3 years

The eight principals who participated in the original ZOOM sessions, represent a diverse range of rural places: in Queensland, Australia from the isolated remote Mornington Island at the tip of the Gulf of Carpentaria to the rainforest mountain village and tourist destination of Kuranda located in the tropical northeast coast. In the United States, places included school settings in the rural heartland of Wamego and Chapman communities of Kansas and the small school districts of Turkeyfoot Valley and Salisbury-Elk Lick in Pennsylvania. The principals have diverse leadership backgrounds as illustrated in Table 1. Each of the rural places can be identified as having their own *rural social space* (Reid et al., 2010; Green & Reid, 2021) with different rural assets and affordances. A rural social space most simply is a theoretical tool that encourages understanding about any given place through the interconnected notions of its economy, geography and demography, or as Green & Reid (2021) explain:

> It refers to how the rural is conceived both *scientifically* (in terms of quantitative measures) in policy, historical, economic, and tourist descriptions, and *metaphorically* (as an image, idea, or icon) in culture, history, policy, and economics. (p. 35)

Listening and Learning from Rural Principals

The *International Rural School Leadership Project* originated following an invitation for one of the paper's U.S. co-authors to present at the annual conference of the Society for the Provision of Education in Rural Australia (SPERA) in late September 2019, and, with arrangement of the director of international engagement for Queensland University of Technology (QUT) (paper co-author), to make presentations for Faculty of Education at QUT. Also, the President of SPERA (paper co-author), who served as principal of a rural school and provided Queensland Department of Education support for a network of schools, took the U.S. visitor on a week's tour of Queensland schools in early October following the SPERA conference. This experience and announcement of COVID-19 lead to discussions with the chair of the Department of Educational Leadership at Kansas State University (co-author) and colleagues in Australia (co-authors) that launched interests in holding virtual collaborative leadership sessions as forums for principals of rural schools in each country to share early challenges and successes in the COVID-19 pandemic.

What commenced as collaborative *listen and learn* via one-hour ZOOM forums held in the first week of July 2020 evolved into a project that included ZOOM follow-up interviews and a film (i.e., video documentary) designed to capture the leadership lessons for sharing with others (see International Rural School Leadership Project video at (https://youtu.be/wpIMno6Ns10). The co-authors conducted the follow-up interviews in July-October, 2020. The College of Education at Kansas State University (KSU) funded the film production and all participants signed media consent forms granting permission for use of their ZOOM recorded presentations, comments, and photos or video footage. With the permission of the participants, actual names of the participants, institutions and communities are used in this paper.

While the original participants for the documentary involved a wider group inclusive of university and rural national associations, for this paper only the ZOOM recorded interviews of the principals, state officials and the PA intermediate unit director conducted as follow-up to the principal panel sessions were analyzed (of note: we recognize that this is a limited sample; our intent was to capture and report on the experiences of the participants in a way that gives context to what they shared, not to produce broadly generalizable results. We do however contend that the detailed accounts support results that are *transferrable* [Lincoln & Guba, 1985] to other settings, with appropriate caveats). We analyzed the ZOOM recordings of the eight rural school principals (four female, four male), two state department of education officials (both male), and a regional education service agency leader (male) to understand what support strategies and approaches were used and actioned. As noted, the question that framed our study was, what are the early challenges and successes of rural school leaders through the COVID-19 pandemic? Each co-author reviewed the recordings individually and utilized thematic coding and categorizing (Gibbs, 2018) to generate tentative themes which were then reviewed/tested by the other co-authors (as a form of peer debriefing) and refined in response to feedback received. Ultimately, the co-authors reached consensus on what constituted the main themes for inclusion in this paper.

Results

For the purposes of this paper, two key themes are discussed: *place attentiveness* and *external assistance*. We provide narrative that tells the story

of how principals acknowledged and/or utilized local assets of place in the school and community to address COVID-19 related challenges. Narrative also profiles how actions of state departments of education and a regional education service agency attempt to support local leaders and educators in meeting the COIVD challenges.

Place Attentiveness: Rural Affordances and Assets

The rural principals in this study all knew their places intimately. We found that they demonstrated a form of *place attentiveness*. Place-attentiveness is a relatively new term in rural education, extending from the notions of place-based and place-consciousness (Gruenewald & Smith, 2014) but elevating the standpoint of those to pay close attention to all aspects of place using a rural social space model (Reid et al., 2010). It is a term that encompasses a valuing of the physical place, the diversity of people in and connected to the place, and an understanding of how the place itself affords an agentive tool for educators to use as a teaching tool, framing place *with* power (White & Downey, 2021, p. 10). Corbett (2015) notes the importance of re-presenting rural places as a source of wealth and strength and as delicate environments that require innate stewardship. It is the framing of place in this way that many rural school leaders refer to as crucial to their leadership success and examples of innovation.

Paper-based packs and "Drive-through Maccas". As evidence of rural affordances and assets, a common strategy at the beginning of the school closures for many of the study's principals was to re-create the school as a central learning hub, relaying materials out to homes and families and setting up a variety of hybrid ways of learning and connecting to students. The principals focused both on teacher's capacity needs to provide instruction flexibly and the student's (and family) capacity to receive various mediums of learning. The rural principals supported their teachers to use a mixture of new technologies to deliver the learning materials, packaged with a range of usual communication methods, including home visits, phone calls, drive-by learning trips, visits to their students' favorite places (i.e., fishing and swimming holes), as well as setting up various teleconference-like options to connect together. Many of the principals spoke about the staff parking lot being turned into a *hotspot* for parents to drive through and download key student learning materials onto their devices or to pick up a USB that included the materials.

Karen is principal of a small K-12 school with 105 students (six in senior year) located in an outback Queensland Australia rural setting. Karen notes: "We have lots of cattle and sheep and wide brown plains." Karen explained that many students in her school lacked the access for online learning. A survey was put out to families asking: Could they access a laptop? Did they need to hire a laptop? Did they have a USB? What internet coverage could they access? Could they access emails?

As a result of the survey, teachers at Karen's school created three main ways of teaching. Paper-based learning packs were created with all resources (e.g., pens, paper, reading materials). Some content was placed on a USB with various PowerPoints developed or learning links sent via email. Microsoft OneNote was used by senior students as a tool, but Karen noted, "The system crashed so we needed to go back to paper-based." She described how some teachers drove considerable distance to deliver the home packs to their families. Families then brought the materials back to the school, similar to a *"drive in maccas"* (Maccas is a colloquial name for McDonald's in Australia). Karen further explains:

> We established routines like 8:30 am check in with everyone, then at 11:00 am a storytime where everyone was engaged in reading to each other. Teacher aides rang home each day for students in Prep-year 4 to listen to reading and talk to the students. Home visits were made by admin and teaching staff to check on students learning and well-being. Facebook was used to communicate school events.

The ZOOM interviews reveal that principals quickly recognized many families had limited access to digital technology. Often, families were struggling with the competing needs of assisting children's learning and trying to adjust to new demands of their employment or work life. Adrian, principal of a school in Kuranda's tourist community in the rainforest in far north Queensland, explained challenging experiences of a community that relied predominantly on tourism and the collapse of this industry as a result of the restrictions associated with the pandemic. Such closures had profound impacts on the community. Adrian described a consequence:

> Our response to Covid-19 and the resultant introduction of remote and flexible learning was student and family focused. Our research revealed that many of our students and families did not have access to effective internet and

therefore we utilized a combination of online and paper-based learning.

He further explains:

Initially going to online learning proved a challenge as the majority of our teachers had never previously experienced such a mode of lesson delivery. This is where we utilized the expertise of staff who were familiar with online learning to provide leadership and expertise in this area. We quickly learned that when one is planning for an online lesson we had to plan for a face-to-face lesson and then cut the content by half as teachers can get through much more in a physical classroom than they can in an online lesson.

Amy, a long serving principal of an elementary school (360 students) in Wamego, Kansas, described being one of the first schools to close. She emphasized that the Governor of Kansas was the first to say, "We are closing schools, we are not quitting school, but we are going to change school as we know it." Amy described the intense two-week period where teachers were given the time to prepare for remote and continuous learning. She described the importance of three key aspects to the success of the shift to remote learning: relationships, communication and transparency. Amy, clearly a relational leader, described the importance of building trust with the parents and community and noted: "Once you build trust, the school and the family are one – they are a team – we will always do better together."

Besides the difficulties of accessing digital devices through the initial period of the lockdown, one of the largest challenges for schools was determining how best to address students' individual learning needs. Amy spoke about teachers calling students to talk through any questions or issues and teachers visiting homes to teach from the "side of the street so they could connect with one another." At the time of the interview, the school was preparing for new forms of differentiation, based on competency grade levels, enabling teachers to more fluidly place students together from multiple classes for the purposes of discussion, remediation and extension.

Kevin, a long-standing principal in the community of Chapman, Kansas, spoke about the excellent support offered via the Kansas taskforce established centrally to aid schools in their continuous learning plans. The pandemic reminded him of his second year at the school, when a tornado completely demolished the school. He had to spend two years rebuilding the school and devising alternative mediums of learning. Kevin described a diverse community, with students from farming backgrounds and students from military families: "We have farming families, raising cattle, pigs and crops and who might never have been out of Chapman. We also have those from the military who have been all over the world."

While the school set up a drive-through system for educational purposes, staff also delivered food to families. In addition to educational materials, meals were provided to families who usually participated in the free breakfast and lunch program at the school before the COVID-19 pandemic. Kevin acknowledged that life on the farm must go on and students were able to integrate their home chores and learning in new ways. Kevin explained that a young student listened to the teacher podcast while out on the farm in the family tractor. Kevin reflected on this new type of school engagement and the capacity for both school and farming to continue.

Interviews revealed that a primary asset and affordance for rural principals was the community itself. Also, a networked professional learning community approach became key to ensuring learning outcomes for students were reached. For example, Felicity, a principal of a small rural school in the southern part of Queensland with a population of less than 1,000 people described the importance of relationships and connectedness. Felicity noted:

Relationships are incredibly important and in fact they underpin everything. A school principal needs to develop relationships with staff, students, parents and the community. In times of a crisis such as the pandemic, you need to be able to build trust – the students, staff, parents and community need to be able to trust that you know what you are doing and that you have everything under control. This trust comes from the relationships which you have established with them over time. It is like banking credit.

Nicole, a principal in the Turkeyfoot Valley Area School District in Pennsylvania, became district superintendent in April. The single-campus prekindergarten through 12th grade district enrolled less than 300 students in its elementary and junior/senior schools. Nicole explained how being so small was advantageous to her leading during the COVID-19 pandemic:

The capacity of our staff is pretty wide, a context of staff having experience with all the levels and variety of jobs and roles within the school. It helps with my leadership because as I was trying to lead in a way that was completely new, that was changing all the time, and information was changing all the time. I had people

that could lead that had a lot of capacity. By all of our experiences, with us being so small and having to wear so many hats, and having the different understandings, it helped my leadership. So, I was able to lead by honing in on the capacity of my staff.

Nicole also explained how living rurally means some students do not have access to internet technology. The week after schools closed parents could pick up paper and pencil packets at multiple sites as an option for accessing what the teachers were providing online. Nicole explained seeing the ability of all staff to work together and step up "really instilled in me the importance of continuing to build that capacity because it was so essential for us with the school closure for moving forward." Nicole also noted:

Over communicating and finding various ways to communicate is one thing I have found very important with this pandemic experience…to be able to actually reach the parents and help them understand what is going on. Parents wanted to know and be involved to represent their child the best. There also has been more parent appreciation for our teachers.

Joe serves as principal of the elementary school grades and district superintendent of Salisbury-Elk Lick School District, the second smallest school district in Pennsylvania with less than 200 students. Located in one of the most rural parts of the county, most residents work outside the area, as few businesses exist locally. Joe explains early experiences with the COVID pandemic this way:

We had to prioritize what we needed to do. It was 3 o'clock on March 13 and at that point we did not know if schools would be closed until the end of the school year. We started Friday night thinking about feeding the students as a primary focus. By Tuesday we were delivering breakfasts and lunches at four drop-off points. We decided as an administrative team that first we needed to be sure our kids were being fed.

Joe found communication was vitally important. Parents needed to understand that teachers and students were not taking time off from school, that only the buildings were closed to in-person, regular instruction. Teachers would continue providing instruction for students. They had to decide how student instruction would be delivered, knowing limitations existed with student access to the Internet and technology. Lots of patience was necessary with technology needs. For example, refurbished devices had to be obtained after the original purchase of devices for students to use at home remained unavailable from the manufacturer. Joe also experienced a huge technology-related success:

What I was really proud of as a success was our staff. For example, in the elementary school, we didn't utilize technology prior to the COVID-related shut down. We used in-person instruction, mentoring, etc. as our instructional approach. Come March 13 [2020], that wasn't an option. So, our elementary teachers took Google Classroom training through IU8. The teachers said: We have got to learn it. We have to do this. So one of the big successes I am most proud of is how the teachers stepped up and said we have got to do this. And they did.

Joe explained three key takeaways from the COVID-19 experience: the value of a rural community, the value of communication, and creativity. Joe acknowledged as a school principal and superintendent you are always working every day on your home-to-school connection and what the school means to a community. Early in the pandemic he was able to test that out when the school buildings were closed but education had to go on, stating:

I felt like all the work we did leading up to the March 13 situation to strengthen ties with the community was reciprocated by the community…I always recognized the value of community support. I think we all do. But seeing it come back, with people who understand this is not something you could have prepared for, and whatever you decide we will be good with. I really saw the value of community support.

Staff created a Facebook page for the school. "We put photos of homecoming on it…and other things, like student pictures would be delivered on a certain date…You see the value that has." Joe found "no matter how you look at it, communication has value, like community." Also, being creative, especially at the elementary school was a key takeaway for Joe. He described how the high school had iPads and Google classrooms. Some kids had devices at home. But in the elementary there were no devices. "So, we had to get creative in how we could do work and send things home."

External Assistance: Supporting School Leaders

Interviews with state officials in Queensland, Australia and Kansas, and with a regional education service agency official in Pennsylvania revealed the second theme, with another layer of leadership, supporting the principals. In Australia, a

national educational system and national curriculum exists, with a states-based management of the public schools. Unlike the United States, in Queensland there is no local school district with an elected school board, a district superintendent or a district office. In Queensland, the state maintains regional offices that provide leadership and support for local schools. Like the U.S. system, the federal government does provide some financial support to each state system of public schools. Queensland, like other states in Australia, had to react quickly to the COVID-19 pandemic. An official in the top level of the Queensland Department of Education noted:

> In the COVID pandemic environment we did things in a day that usually would have taken any bureaucracy six months. Failure was not an option. We had to find a solution to the challenges. You had to find it right now, and it had to bloody well work. It can't be just halfway. It has to work.

With the shutdown of schools, Queensland state officials quickly recognized the need to deliver the national curriculum in an online environment consistent with state adaptations: "We don't have the same setup for every school, the same community support for every school." Consequently, the state education official explained:

> We had to use an agile approach that would allow schools to make local decisions that best supported them and their community. What was exciting was we looked at the high level of what would a school need, what would a community need for moving into the space of delivering at-home learning in an unspecified period of time. What we did was develop a roll out of two weeks units of work in the Australia curriculum, which are online and available to parents and to schools.

The Queensland Department of Education also established partnerships with three television stations. The state department official noted:

> In a week we reached an agreement on a total funding approach with the television stations. We were able to get airtime two hours a day for three days a week for the Australia curriculum delivery and time for students to have access to disability and inclusion resources. So, we created a television station with television shows that could be broadcast to every student in Queensland. We also developed ED TV. Now we have taken the segments we had in the television shows and sliced them into short vignettes. Teachers

deliver them directly with students in the classroom.

The Queensland Department also took cutting edge pedagogy used by some of their best teachers in delivering elements of the curriculum live online as examples to show beginning teachers and those teaching out of their subject areas what good teaching online looks like. The Department also added a range of support resources around teaching students with disabilities, indigenous students, and students in rural and remote communities. The department official noted:

> We did all of that in five weeks. We did it within budget, as we stopped a whole range of elements within our work and redirected our resources to deliver all that. We also developed podcasts and audio lessons that people can access. So there is no shortage of things in the curriculum space.

The Department also developed a set of guidelines to support schools' operations and principal decision-making and reviewed them for changes each week as the pandemic circumstances changed. The Department official noted: "They got updates live on a weekly basis and thus were able to change as necessary with pandemic challenges."

Top level Queensland Department of Education officials also held weekly communications with the Department's regional directors and assistant directors that were working directly with the schools. Regional staff used online technologies especially, so they could give support to the remote and rural schools. The state department of education official commented:

> There has been significant change in Department operations. We have learned the online approach can be quite effective, as we trained ourselves to deal with that different medium. Teachers received some of their best professional development ever during this period of the pandemic….The agility and leadership from school leaders was astounding. The actions of principals made us all look good; the reality is they have gone above and beyond to support their kids during the COVID pandemic.

In Kansas the Commissioner of Education held a weekly ZOOM meeting with school district superintendents across the state. As the Commissioner noted:

> It was a daily meeting during March, April and May of 2020, which we shifted to weekly soon after Memorial Day (May 25, 2020). The purpose of the meeting was to bring the superintendents up-to-date on policy things, everything from masking requirements to

operations that impact schools. I also would try to troubleshoot issues or challenges for them.

The Kansas Department of Education also partnered with other organizations to set up training sessions on how to pivot to online learning. The commissioner noted that roughly 90 percent of his time after schools closed to in-person instruction was spent on COVID related issues. Half of that time involved taking phone calls and trying to help people navigate a specific situation. Three other top education department officials also provided similar services. The other half of time was consumed trying to think strategically about what might be needed to get through the next series of months and through the entire school year in a COVID related experience. As the Commissioner explained:

> I am a native of Kansas. Consequently, I know most of the players. And I still see myself as a school person, a teacher, principal and superintendent. We are here to help. I don't see us as a bureaucracy, though there are times we say, 'we are going to do this now.' We really are just trying to help school personnel get through the challenges.

In efforts to support challenges faced by the local school districts, the Commissioner explained a major takeaway or lesson learned:

> During such a time of unknown it is really difficult to lead. It is when you don't have universal agreement for the immediacy and must plan for the unknown, a fight over whether you are going to wear a mask or not, a fight over whether or not you are going to quarantine, or are you going to play Friday night football or not. There was no universal agreement on what was going to happen, as those decisions were left to the 105 counties, the 286 public school districts and another 50 to 70 private systems. Everyone had a different idea of what was going to happen. So you are planning with all these different assumptions that continue to change—and planning for an unknown. That is almost an impossibility.

The Commissioner observed within 30 or at most 60 days into the COVID-19 pandemic environment that school system personnel increasingly exhibited trauma-like symptoms and consequently noted the evolving model of education delivery was unsustainable in the long term. The Commissioner explained a key takeaway from his experiences this way:

> Even if the model of educational delivery is a hybrid, they can't sustain that. Parents are not going to accept that for nine months. In-person instruction makes sense for parents, but educators are saying we can't do that because we are being quarantined every other day. Teachers say I come to school, and I don't know if I am going to be teaching or not. I have 10 percent of my kids remote. I have different lessons and kids don't show up. So, I think this anxiety that every day is a different environment, is my biggest takeaway from the pandemic experience so far.

The Commissioner and state department of education officials first contemplated how to get school districts to know that the pandemic was not going to be over soon. State officials hoped the pandemic would be over and schools could start the fall semester of 2021 in a somewhat "back to normal" environment. Thus, the Commissioner summarized a key issue in the contextual environment of supporting school leaders:

> How do you sustain that long in an environment that no one likes and everyone wants to go back to normal? Then, how do you deal with the anxiety both on the parent side and the school side? That is the biggest takeaway I have found so far.

Pennsylvania has approximately 500 school districts, with an average enrolment of just under 2,200 students (USED, 2020) and a governance structure characterized by local control. Approximately 50 years ago, the Pennsylvania Department of Education (PADE) devised a support structure of 29 Intermediate Units (IU) and assigned school districts that each IU serves in its respective region. The IUs are an intermediary between the state department of education and the local school districts. In essence, an IU is a quasi-state agency that sits between the top level of the state's school system, (state department of education and state board of education) and the local school districts. Though originally responsible to provide special education services only to the school districts, since 1992, when the school districts began hiring their own special education teachers, the IUs now are more entrepreneurial and offer a variety of administrative and educational support services. An IU can also sell its services to any school district in the state. From a national perspective, IUs are classified as a regional education service agency, of which more than 550 exist in 45 of the 50 states (AESA, 2022).

Appalachia Intermediate Unit 8 (AIU8) was the IU that served the school districts represented by the PA principal-superintendents in the project. The AIU8 transitioned quickly to provide supports during the COVID-19 pandemic. The IU's executive director noted:

A significant shift in IU8 services occurred when the schools closed to in-person instruction on March 13, 2020. The PADE became very reliant on the IUs to get the word out to the field regarding how to educate the kids, what criteria comprise the continuity of education plan, what a school district must do to meet the state's requirements. Though AIU8 had excellent relationships with its 35 school districts, the COVID-19 environment made the relationships tighter.

Soon after schools closed to in-person instruction, district and school leaders began asking for assistance in helping teachers provide instruction online. Fortunately, the IU had considerable experience from offering programs based on online learning. In response to the request, the IU began offering webinars and training for school personnel, teachers, principals and superintendents on how to teach online, how to supervise teachers online, and how to set up an effective online school. The IU8 executive director explained:

> That was the biggest shift we made, along with moving more into coaching as a support. We began coaching about a dozen principals, which mostly was being a good listener, as they simply needed someone to talk to about their challenges. There are about 5,000 teachers in the IU8 region's 35 school districts. In the last two months the IU trained more than 900 teachers on how to teach online.

Major efforts focused initially on helping school systems accept online or hybrid learning as a viable instructional strategy. Superintendents, principals and teachers required reinforcement that it is alright they are studying how to be more effective in an online environment with students. Most of the 35 school districts in AIU8's service region are rural. School and district leaders care deeply about their kids and their well-being. As the executive director commented in summing up early experiences to the COVID-19 challenge:

> One of the reasons I took this job as executive director of the IU is you can just sense how much the leaders care about students and people in their communities. I hold a ZOOM meeting every Thursday morning with superintendents of the districts. I begin and end each meeting with a *Thank You* for being such fantastic leaders because they won't make a decision without thinking about students first. And to me that is all that counts.

Conclusions and Discussion

These leaders shared their early experiences with the COVID-19 pandemic, starting with school closures that occurred in March 2020. Their stories provide a range of narratives where rural school leaders created innovative approaches to best meet the diversity of student learning needs and rural contexts. The comments illustrate the power and authority inherent in the state of being rural through an *agentic* stance (Bandura, 2001) – a position from which rural residents and researchers engage in deliberate, proactive efforts to develop and test innovative approaches to address current challenges and inequities. Rural principals strived early in the COVID-19 pandemic to sustain learning opportunities for students and address well-being issues of students and their families.

Principals were salient to their place and people. Leaders used creative and resourceful strategies to provide students and their teachers with flexible and different learning experiences as the pandemic evolved. Moreover, rural leaders at the regional and state levels quickly used a range of digital tools or built networks and partnerships for school leaders to discuss COVID-19 related issues and provide teachers access to important training and curriculum resources for offering instruction online.

Consequently, the educational leaders embraced a broad operational definition of *resident resources* to identify and activate both human and institutional assets and affordances within their communities (Beaulieu, 2002). As operationalized here, a community asset is an existing element of the community that offers the potential for benefitting both the element itself and those who engage and activate it. Initially an aesthetic theory of design, affordance theory (Gibson, 1975) puts forth the principle that an object's design can create perceptions that suggest the opportunity for a specific type of action (e.g., an object designed in the shape of a doorknob will encourage gripping and turning). The use of affordance theory has since evolved and expanded to applications in varied fields, including education (e.g., Kordt, 2018). It offers a useful framework for describing how pre-existing aspects and elements of the rural communities offered guideposts and structures that facilitated creative responses to challenges imposed by the COVID-19 pandemic.

The school leaders used elements of social capital (e.g., relationships, collaborations, and partnerships) within rural communities and with external support agents to arrive at important actions to address challenges of the pandemic. The

actions of formal and informal leaders and other respected and credible *boundary crossers* who move between groups within communities and across external community boundaries (Kilpatrick et al., 2002), as well as the actions of community members themselves, expose social capital at work (Kilpatrick et al., 2021).

As experienced by school leaders, the COVID-19 pandemic revealed that schools are more than a place of knowledge acquisition. School is part of the social fabric that has reciprocal relationships with social, health, cultural and economic aspects of life. Making education systems more effective and equitable for all requires a better understanding of the complexity of schooling as part of our increasingly fragile societies (Sahlberg, 2020). *Place* is not only a human imagining, but also a social construction (Hibbert, 2013). By definition, "it is the experiences, activities, routines and interactions (or ways of inhabiting a space) to which individuals or groups assign meaning" (Roberts & Green, 2013, p. 96).

Principal and external support actions contributed to a nuanced understanding of resilience as a dynamic process of ongoing interactions between an individual and contextual resources that support positive adaptation within the context of adversity (Downey, 2017). Studies have found that this process of positive adaptation for communities and individuals is not a permanent achievement, nor is it the result of a singular trait such as personality. Rather, resilience is a positive

trajectory that is sustained by a combination of ongoing protective and supportive interactions between individual, family and local contextual resources that work together to support personal and/or community success (Downey, 2017).

In a crisis situation such as that of the COVID-19 pandemic, staff need to have faith in their leaders for their sense of security. Principal comments in both countries demonstrated the importance of distributive leadership in-the-moment of addressing critical challenges. Principals recognized the expertise of teachers and gave them the opportunity, autonomy, and capacity to undertake leadership roles and make decisions in-the-moment that best served their students and their families as the pandemic evolved.

For more details of principals' experiences, photos of rural community context, and comments of others, including the executive director of the National Rural Education Association, we encourage readers to view the video documentary of the International Rural School Leadership Project at https://youtu.be/wpIMno6Ns10.

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