

Elementary schools' response to student wellness needs during the COVID-19 shutdown: qualitative exploration of innovation and readiness

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Background

- Schools are crucial settings for a “whole child approach,” including providing social emotional support, healthy nutrition and physical activity opportunities
 - Children living in high-poverty areas or belonging to minoritized racial/ethnic groups may benefit most
- Schools serving these children often face resource constraints and other challenges to implementing a whole child approach
- COVID-19 exacerbated need among children, and challenges among schools, but also illuminated the strengths of schools and school systems to meet students’ needs
- Understanding challenges and strengths of schools’ response during COVID-19 can inform provision of resources to improve implementation of a whole child approach

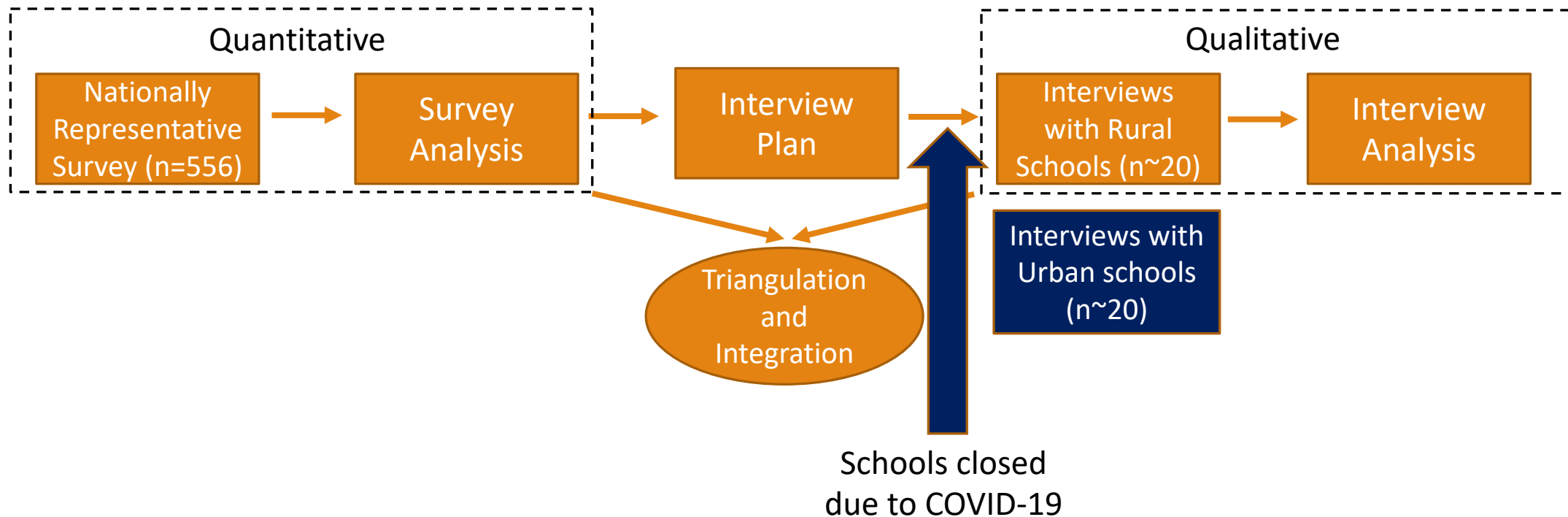
Purpose

Qualitative phenomenological study—conducted in the months after schools initially closed due to the COVID-19 pandemic—to explore schools’ innovative solutions to provide health and wellness support to students, and describe how urban and rural schools adapted services for students and families while prioritizing community safety

Methods

Study Context

- Embedded within a nationally representative explanatory mixed methods study examining implementation of wellness practices in U.S. elementary schools



Data Collection Methods

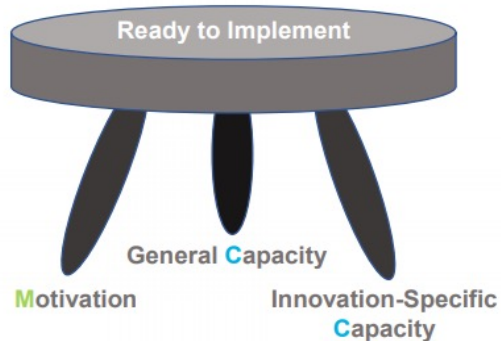
- Modified interview sampling plan to include both rural (n~20) and urban (n~20) schools
 - Stratified sampling based on NCES locale data
 - Snowball sampling within schools
- Modified semi-structured interview guide
 - *What roles has your school played in the community to support student health and safety as a result of the pandemic?*
 - Probes on school meal distribution. motivation, preparedness, leadership involvement, resources
- Conducted interviews via Zoom between April and June 2020
 - Averaged 42 minutes (SD=13; Range=19-91)

Data Analysis Methods

- Three coders used Dedoose Version 7.0.23
- First cycle:
 - Iterative open coding to determine a compatible coding structure
 - Two coding sets emerged
 - Description of innovative roles schools took on – “network of support”
 - Factors that influenced schools’ ability to take on and maintain those roles
- Second coding:
 - Axial coding for second coding set applying the $R=MC^2$ heuristic
 - Identified differences between urban and rural themes

Data Analysis Methods

$$R = MC^2$$



- **Motivation:** Features of an innovation that contribute to whether people want to do it and commit to making it happen
- **General Capacity:** Characteristics or conditions applicable for any innovation within an organization
- **Innovation-Specific Capacity:** Characteristics or conditions necessary to implement specific innovations within an organization

Results

Sample

SCHOOL CHARACTERISTICS (N=39)	n	%
Student race/ethnicity		
≥50% Asian	1	2.6
≥50% Black	3	7.7
≥50% Hispanic	5	12.8
≥50% White	19	48.7
Other	11	28.2
Socioeconomic status (% of students eligible for FRPM)		
Higher (<33%)	8	20.5
Middle (≥33% to <66%)	16	41.0
Lower (≥66%)	12	30.8
Not reported	3	7.7
School locale		
City: Large	6	15.4
City: Mid-size	4	10.3
City: Small	9	23.1
Rural: Fringe	9	23.1
Rural: Distant	9	23.1
Rural: Remote	2	5.0
School size (number of students enrolled)		
>650	9	23.1
450 to 649	9	23.1
250 to 449	12	30.7
<249	9	23.1

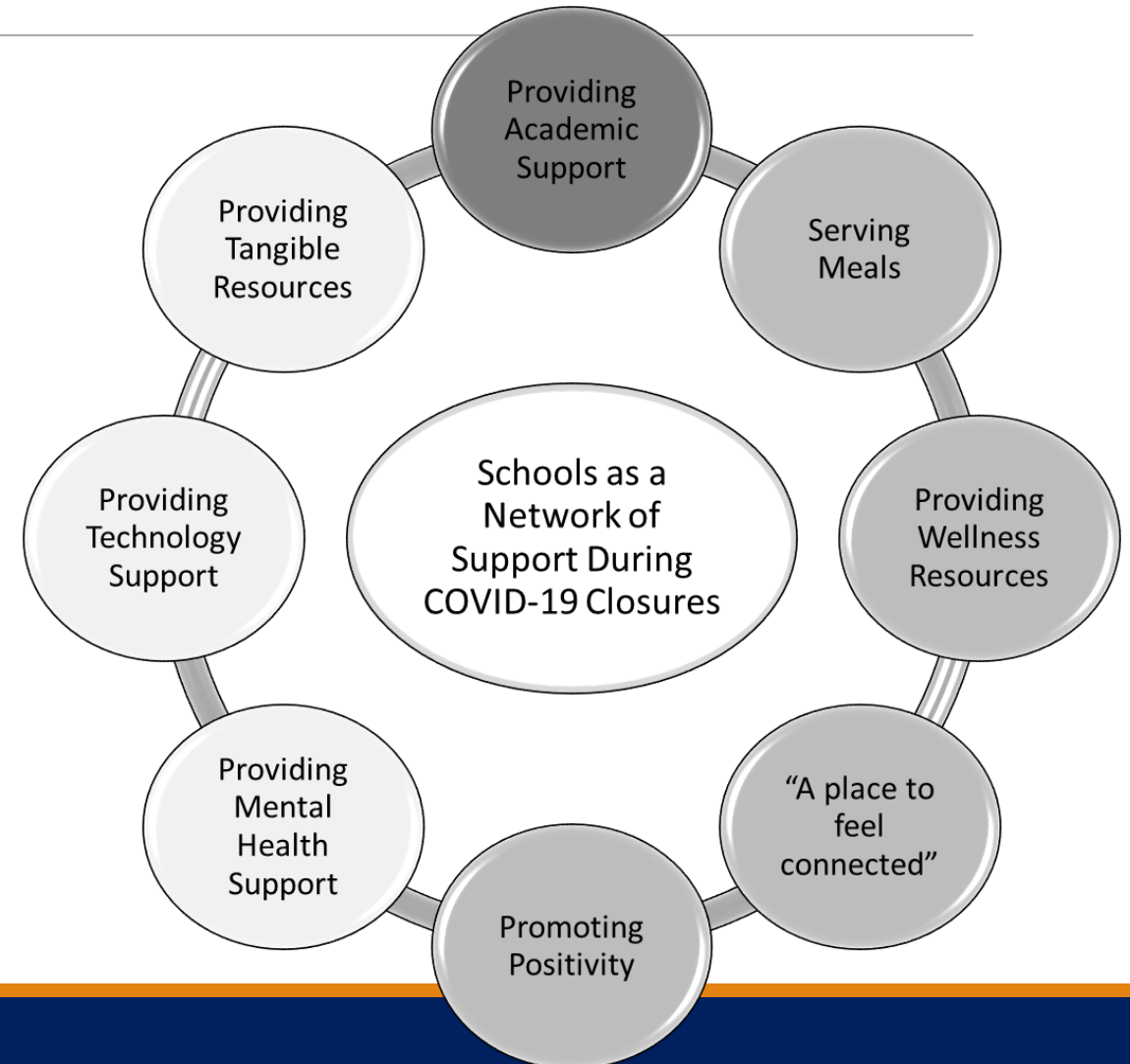
Sample

INTERVIEW PARTICIPANT CHARACTERISTICS (n = 50)	n	%
Role at School		
Administrator (Principal/Assistant Principal/Head of School)	20	40.0
Physical Education Teacher	9	18.0
Classroom Teacher	2	4.0
Counselor	3	6.0
Nurse	2	4.0
Administrative Assistant/Office Manager	7	14.0
Other	7	14.0
Gender (self-reported)		
Female	40	80.0
Male	10	20.0

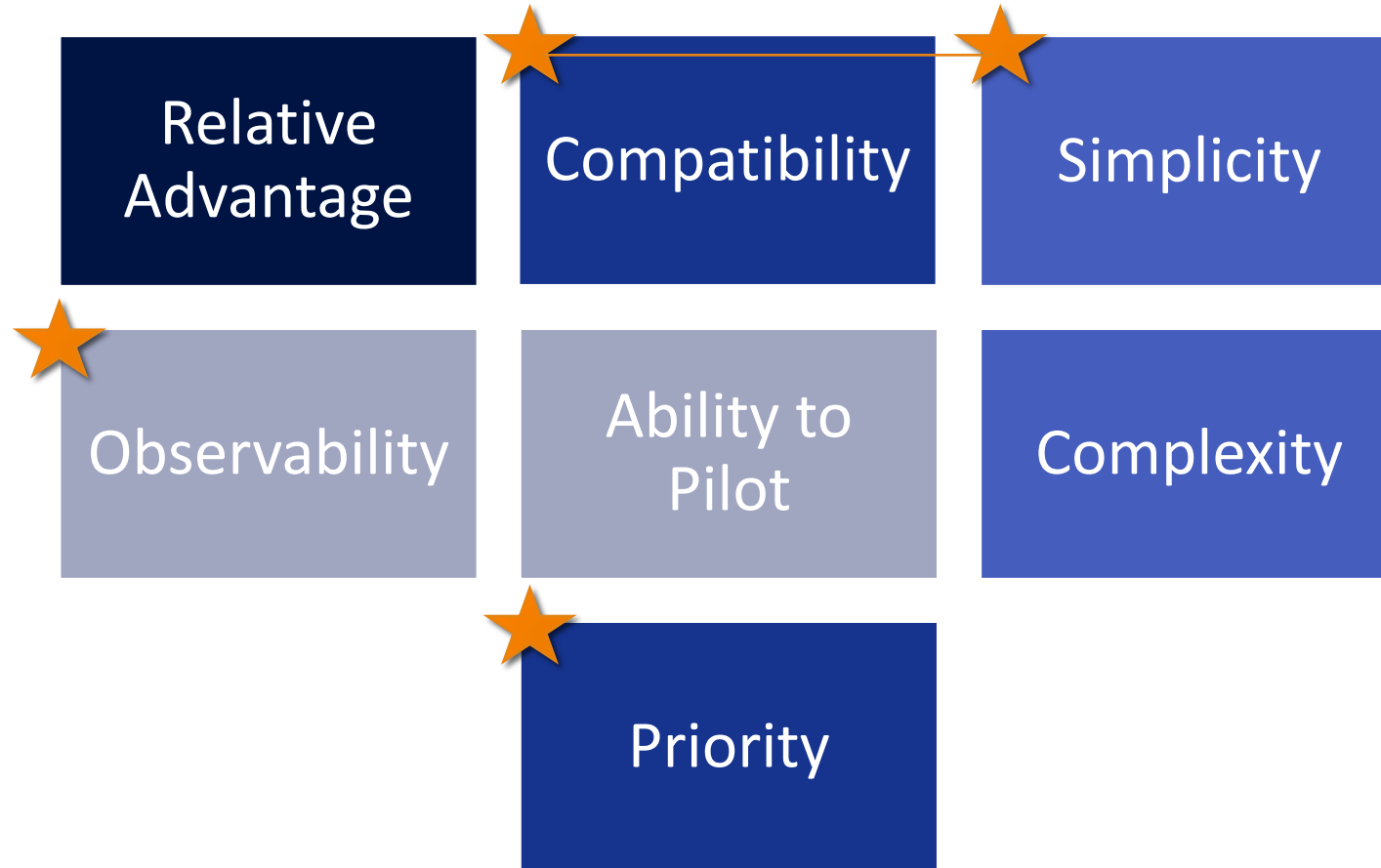
Innovation: The Network of Support

I don't know that that people think as much about what happens at four o'clock when the kids go home. They've definitely taken that on as much more of their job... understanding that school is much more to kids than just a place to learn.

-Urban Principal



Motivation to Take on Network of Support



Motivation – Simplicity/Compatibility

Extent to which network was perceived as an easy role for schools to fill or within the way school usually does things

“We're a small district, there's 13 schools, and so usually when something's going on where there's community that needs to be serviced, my school is a hub, because it is the only one in this area. They try to choose certain schools so that the whole community is taken care of.”

- Rural Principal

Motivation – Observability

Ability to see or foresee that providing a network of support was what families needed during COVID

We based the role we were going to take off the needs of the community, going as far to provide not only food, but computers and tech support for the students.”

- Urban Principal

Motivation – Priority

Importance of the network of support, especially compared to academics

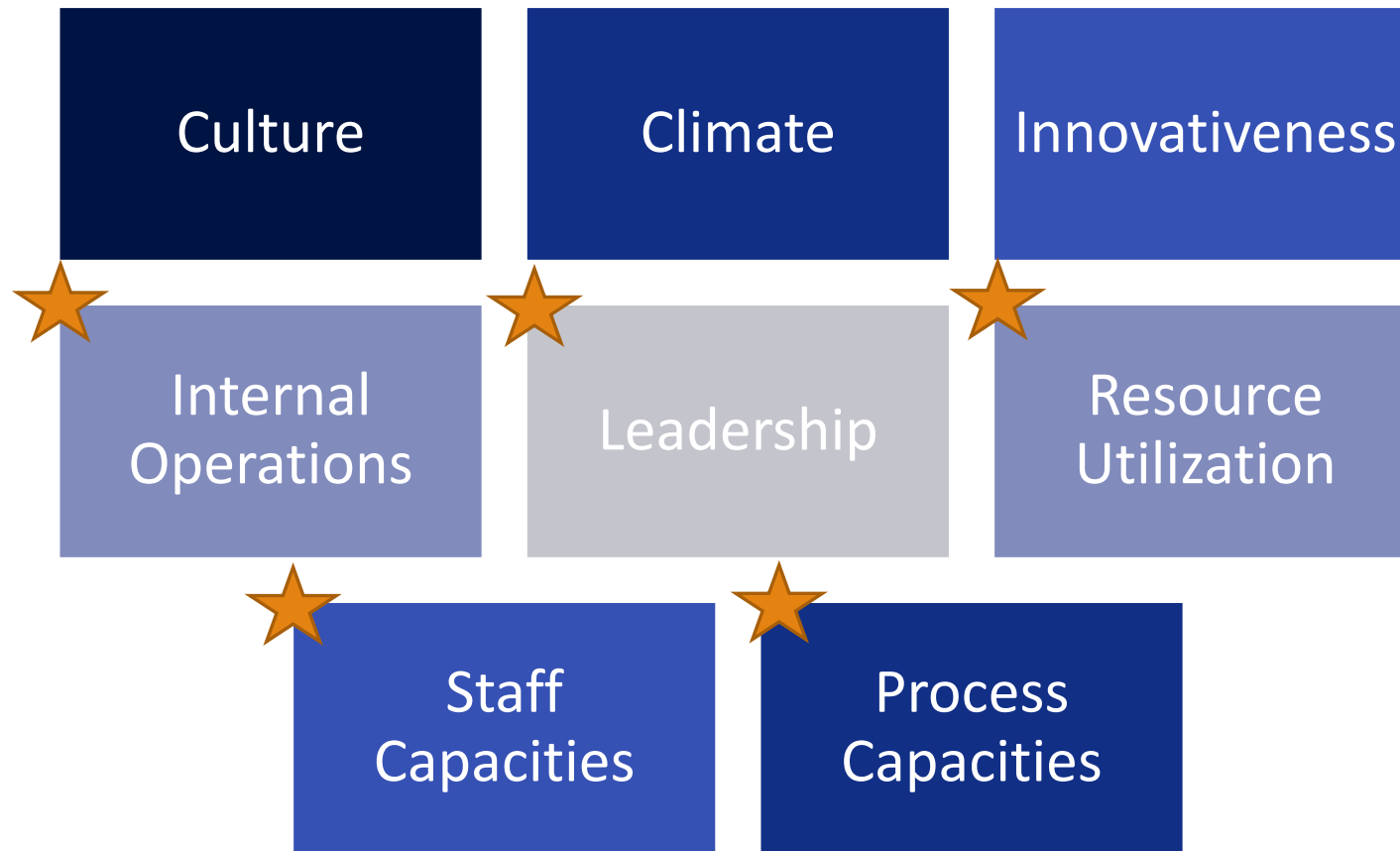
One thing we know is that kids can't learn if they're not fed, and not just fed food, but fed emotionally, fed from a security standpoint. That's why we have tried make things as normal as possible.”

– Urban Principal

Motivation Themes

R=MC2 Construct and Definition	Theme(s)
<p>Simplicity and Compatibility.* Extent to which network was perceived as an easy role for schools to fill or within the way school usually does things</p>	<p>Theme 1: Schools are often the hub of communities/strategic distribution points for resources</p> <p>Theme 2: Pre-existing services were not difficult to adapt or maintain for COVID-19 delivery</p>
<p>Priority. Importance of network of support compared to academics</p>	<p>Theme 1: State mandates required schools to provide meals to students</p> <p>Theme 2: School personnel went above and beyond to extend meal services to the whole community out of desire to meet basic needs</p>
<p>Observability. Ability to see or foresee that providing a network of support was what families needed during COVID</p>	<p>Theme 1: Student participation rates in existing programs such as free/reduced price meals made the need for a network of support clear</p> <p>Theme 2: Personnel from smaller schools described greater ease in identifying which families had the greatest need</p>

General Capacity to Take on Network



General Capacity: Resource Utilization

Ability to use existing funds or technological resources to create infrastructure for the network of support

With the poverty level, a lot of our students didn't have Wi-Fi or Chromebooks - we handed out over 500. It's made us realize that going forward, we need to make sure every student has a Chromebook. The district was also going to purchase hotspots, but that fell through when [WiFi provider] jacked their prices up at the last minute. We ended up just having some students who didn't have the ability to do any work because they couldn't get a Chromebook or didn't have Wi-Fi.

-Rural Assistant Principal

...if it weren't for kids having access to those Chromebooks at home, they may not have been able to link up with their counselors and teachers in a more socially emotional way.

- Urban Principal

General Capacity: Process Capacity

Ability to plan, implement and evaluate efforts to meet student needs

I think we were more prepared than we thought, by having learning management systems in place and having ample staff trained in multiple areas. Our food services department are self-funded...so they had ample resources in terms of financial and human. And we had enough technology, we just didn't have it at home for people. We were in a position to flip it around. I can't imagine if you were in a place that didn't have all these resources, how do you do it distance?

-Rural Principal

It's been interesting. I think it's been a wakeup call, like, we need to get better prepared. We need to have some kind of process in place for something like this...they're coming together really good, but it's been a long process and a very confusing one. And now that the school year is almost over, I think we've about got it together.

-Rural Physical Education teacher

General Capacity: Staff Capacity

Having enough and appropriate staff who can take on any role to meet student needs

I think everybody has gotten more aware of their added responsibility. People always take very seriously the academic part of our mission. But I'm not sure every staff member was so focused on how kids are feeling, what they're going through, what their home life looks like. That gets compartmentalized, so the school nurse, the school counselor or psychologist, worry about those things. In this situation, we've gotten a much broader view of our jobs. Our teachers...have been more involved in finding out what's happening with kids at home.”

-Urban Principal

The entire staff [was involved]. The homeroom teacher was a first step of, 'I haven't heard back from this kid. This mom called and said they don't have internet,' then our counselor reached out, our tech guy was obviously instrumental in getting hotspots, and we had bus drivers delivering devices out in the country. We've had aides, title 1, special-ed teachers, help get in touch with people. It's been an all hands on deck kind of thing.

- Rural Physical Education Teacher

General Capacity: Internal Operations

Presence and quality of communication networks and teamwork among staff (and parents)

Staff started scouring the web for ideas. Our district put out a Google Doc where we could share resources we found, 'hey, this website is an awesome virtual field trip for this'. Which is awesome because you have a huge document to share. And our administrators, anytime they've gotten a resource from the state or other schools or one that they found on their own, they have definitely shared that with us.

– *Rural PE Teacher*

A lot of our parents were saying, 'We need some tech help. So, we're like, 'Okay! Help with Seesaw?' and they were like, 'No, help with turning it on'. A lot of people didn't know how to turn on and off the iPad versus Chromebook or help their kid get access to the camera get on Wi-Fi.

– *Urban Learning Director*

General Capacity: Leadership

Presence and quality of involvement of school and district leaders

Our superintendent included us in discussions about what we were going to do, but he already had a skeleton outline, then just sought our input. He does a good job of collaborating with us, but not giving us decision fatigue and making sure he's got a good idea of what he wants to do. I think he finds that balance between collaboration and just kind of making those easy decisions for us.

– Rural Principal

My principal was very hands on, in the beginning she knew that things were going poorly, so she came up with different plans and wanted to make sure that everyone had access to resources. Leadership from the county level has kind of been hit and miss...kind of messy. People are scared, so they just have not provided a lot of definite answers about what's going to happen in the future.

– Urban Lead Specialist

General Capacity Themes

R=MC2 Construct/Definition	Themes
Process Capacities <i>Ability to plan, implement and evaluate efforts to meet student needs</i>	<p>Theme 1: There was little preparedness and a lot of trial and error. Facilitating factors included: existing technological systems; adequate staff, existing programs or preparedness plans; teamwork; learning from other districts; hands-on leadership; knowing students' needs; having spring break week to prepare. Hindering factors include: changes/slow decision making by state/local leaders, COVID-19 safety concerns; uncertainty</p> <p>Theme 4: Schools used many informal methods to monitor/adjust the network to better meet student needs, including extensive one on one and mass communication with parents</p> <p>Theme 5: Schools used many informal methods to monitor/adjust the network to improve operations or logistics and reduce virus spread</p>
Resource Utilization. <i>Ability to use existing funds or resources to create infrastructure for network</i>	<p>Theme 1: Technology was the most critical resource for supporting students during COVID-19; distribution of laptops and/or hotspots was a high priority</p> <p>Theme 2: Some technology barriers could not be overcome, and schools instead delivered hardcover textbooks, flash drives or paper packets via bus.</p> <p>Theme 3: Having learning management systems (e.g., Google Classroom, Class Dojo) and more tech-trained staff were advantages</p>
Staff Capacities. <i>Having enough staff who can take on any role to meet student needs</i>	<p>Theme 1: Many staff members took on new roles to keep operations going, minimize number of staff in the building, and remain employed. Staff primarily pivoted to helping with meal service</p> <p>Theme 3: Some staff described new roles: calling students who were not attending class; bilingual staff aiding non-English-speaking parents; connecting students to community resources; providing technical support</p>
Internal Operations. <i>Presence and quality of communication networks and teamwork among staff/parent</i>	<p>Theme 1: School closures necessitated new methods of communication among staff</p> <p>Theme 2: Teamwork and resource-sharing were essential and occurred naturally; staff members teamed up in new ways to achieve their goals</p> <p>Theme 3: Caregivers served a key new role in operating the network; communication with families was essential, but challenging</p>
Leadership. <i>Presence and quality of involvement of school and district leaders</i>	<p>Theme 1: Local leadership was perceived very positively, views of non-local leadership (state/federal) were mixed</p> <p>Theme 2: Positive leadership actions often overlapped with themes related to internal operations and process capacities, including: (1) being attentive and in frequent contact, sharing decision-making without creating "decision fatigue" among staff (2) providing emotional support for staff and students, including "trusting" teachers and keeping expectations realistic</p> <p>Theme 3: Leadership were influential in ensuring students had the supplies and resources they needed</p>

Innovation-Specific Capacity for New Roles



Innovation Capacity: Knowledge and Skills

Ability of staff to create network of support for students

“I was really overwhelmed emotionally about the pandemic itself, I was also likewise overwhelmed and anxious with what to do and how to do it and learning a lot of new things digitally speaking or online speaking. Like I'm learning this week, I'm teaching myself how to adapt PDF worksheets to Google Forms. So that's what I'm practicing this week to send home to my students online, so that they don't have to rely on getting a paper pencil packet from me.” –Rural Teacher

“We had a lot of parents that just weren't um equipped with the skills to help. If we could have seen this coming we could have prepared parents, you know, teach them technology skills”
- Urban Principal

Innovation Capacity: Program Champion

Specific people within the school who are particularly promotive of network

“And one of the biggest volunteers that helped me was one of our school bus drivers. She actually rode with me every three weeks when we would deliver the three-week buddy pack. I shouldn't say rode with me, she drove my car and I was the one that was in and out dropping them off. I knew that we had a lot of rural areas, but some of them I had to utilize someone that was knowledgeable that drove a bus that knew where these houses were and she did a great job. She has been sticking with me and more than happy to help out.”

–Rural School Nurse

Innovation Capacity: Supportive Climate

Staff attitudes, parent attitudes, and examples of culture, norms or values that facilitate network

And some of [parents] have been grateful and say, said, 'we see that the school, the district is trying to do what it's supposed to do to provide the service and teach our students.' And I believe we have a spectrum and it's not only black and white. With this pandemic, we have realized that students and parents can experience stress, anxiety, and sadness, different feelings. But knowing that this school... and all the teachers are there to provide the support that they can for students has shown me that many teachers truly care for their students. And that's really good to see because that's the reason why we're here."

–Urban Community Assistant

Innovation Capacity: Relationships

Support for network from other schools, community partners, volunteers, other external organizations

“[Department of Health Services] provided good information, to try to help out with a lot of our kids, the food bank was quite a bit involved, ECCO was involved. A lot of the community recreation centers had information to give out to assist a lot of the parents in that community.”
–Urban Human Services Staff

“I know that it doesn't just take the school district to make this happen. So there are tons of community supports, whether it be a business or a hospital or a church that is always working with the school district to support them.” –Rural Principal

Innovation-Specific Capacity Themes

R=MC2 Construct/Definition	Themes
<p>Knowledge & Skills <i>Ability of staff to create network of support for students</i></p>	<p>Theme 1: Staff had base knowledge, but still experienced a learning curve</p> <p>Theme 2: As noted in internal operations, parents become key parts of organization who also needed knowledge and skills to facilitate student success; lack of parent knowledge was a barrier</p>
<p>Program Champion <i>Specific people within the school who are particularly promotive of network</i></p>	<p>Theme 1: While teamwork was often noted, sometimes individuals who excelled in filling new/existing roles were mentioned as leaders</p>
<p>Supportive Climate <i>Staff attitudes, parent attitudes, and examples of culture, norms or values that facilitate network</i></p>	<p>Theme 1: Staff were willing to do “whatever it takes” to support families, many spoke that taking care of each other was part of the school culture</p> <p>Theme 2: Meeting basic needs was a primary concern of school staff, rather than over-emphasizing academics</p>
<p>Inter-organizational Relationships <i>Support for network from other schools, community partners, volunteers, other external organizations</i></p>	<p>Theme 1: Most schools relied on local food banks, churches, state agencies, internet companies, and other organizations to help meet student needs</p> <p>Theme 2: Teachers and administrators worked across districts to collaborate and share resources</p> <p>Theme 3: Teachers utilized online networks to adapt their instruction and transition to virtual platforms</p>

Urban/Rural Differences

- Being a small school was viewed as advantageous due to tightknit relationships and smaller student body to keep track up
- Rural schools more reliant on network of community partnerships and support than internal school staff
- Both urban and rural schools faced technology-related barriers and described innovative mitigation strategies, but for some rural families, the digital divide could not be overcome

“Luckily we’re a smaller school, smaller staff. We all work well together anyways. So I think that was a positive for us.”
–Rural Physical Education Teacher

We do have some resources that we put out on Facebook and the web page for activity ideas and things like that to go along with their lessons, but we're very rural, and we're very spread out. So we have a lot of students who don't have access to internet actually.”
–Rural Secretary

Discussion

- Despite lack of preparedness, schools took on network of support without hesitation
- Biggest motivators for schools to provide nonacademic services during COVID-19 included simplicity and/or compatibility with existing services and observability, or doing what was “morally right,” making sure students were fed and that families and school staff knew that they were cared for
- The digital divide that prohibited students with limited or no technology access from benefiting from schools’ network of support during COVID-19, particularly among rural schools, and schools solutions are unlikely to be sustainable in the long-term. Shouldn’t be schools responsibility to resolve this
 - *“...like many districts there are some students who do not have internet. So saying that we are going to do virtual learning 100% is not going to happen. That is the barrier and the elephant in the room moving forward. I don't know how the government's going to address that issue, but it takes more than just a school district to say we're going to do virtual learning.”* – Rural Principal
- Parents became key partners in the network

Future Research

- COVID-19: A key inflection point
 - Increased recognition of the importance of a whole child approach
 - More engaged parents, and more understanding of students' life outside of school by staff
 - Systems to keep track of students outside school hours
 - New community partnerships
- Readiness motivation and capacity “rise and fall over time”
 - Continue to monitor capacity for wellness-focused initiatives
 - Expand investigating to condense overlapping themes and identify most crucial readiness constructs to target with tailored implementation strategies

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