Wisconsin District Administrators' Decision-Making Approaches during COVID-19 Pandemic-Related School Closures

Hassan Elannani[*]

* Corresponding author
E-mail: elannanih@uwosh.edu
University of Wisconsin-Oshkosh, USA

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ABSTRACT

This study sought to examine the decision-making approaches used by Wisconsin district administrators when addressing COVID-19 pandemic-related school closures. It also examined the factors that impacted their decisions to close the schools or keep them open, the stakeholders considered when making these decisions, and the learning formats and platforms used during school closures. The research thesis was that Wisconsin district administrators' decision-making approaches during the COVID health emergency were more classical and shared than political and that they were driven primarily by the well-being of students and staff. A survey was emailed to all Wisconsin district administrators. The survey results showed that Wisconsin district administrators' decision approaches were predominantly classical and incremental in nature and high in satisficing, mixed scanning, and shared decision-making. The garbage can and political approaches ranked the lowest. The results from the interview questionnaire revealed that all Wisconsin district administrators followed state mandates to close the schools but relied heavily on input from stakeholders before making any mitigation decisions or choosing any learning format. They prioritized the well-being of students, families, and staff when making such decisions. The primary factors taken into consideration by district administrators to decide on virtual or in-person learning included guidance from health authorities, number of infection cases, student learning, availability of technology, and community dynamics. District administrators facing epidemic health emergencies need to seek all stakeholders' input on mitigation measures, but student learning should be the primary driver behind closing schools or going back to in-person learning.

KEYWORDS

COVID; decision-making; pandemic; school closures; Wisconsin

INTRODUCTION

The COVID-19 pandemic has been described as a serious global health threat (Centers for Disease Control, 2020) and has caused major disruptions to American schools on a nationwide scale (U.S. Government Accountability Office, 2020). According to a RAND report, most U.S. public schools were not prepared for a health emergency crisis such as COVID-19 (Diliberti et al., 2020). Although research on the 2009 H1N1 pandemic focused primarily on how other countries prevented the virus spread by closing schools temporarily on the orders of government authorities (Awofisayo et al., 2013; Kawano & Kakehashi, 2015; Wu et al., 2010), the limited research on American school systems' response to the 2009 H1N1 pandemic showed that decisions to close schools vary widely and contribute to uncertainty and tension between school districts and health authorities (Klaiman et al., 2011; Navarro et al., 2016). This study will help show how districts independently respond to the pandemic challenges and how administrators make their decisions as well as the decision-making processes.

Wisconsin's 421 public school districts have responded to the COVID-19 pandemic in various ways and depending on state and local guidelines. As a result, they have independently made their decisions whether to open, close, offer hybrid learning, or go completely virtual (Association of Wisconsin School Administrators, 2020). A comparative analysis of schools' responses to the H1N1 and COVID-19 pandemics shows that during the 2009 H1N1 pandemic, online learning was not an option in the affected schools due to limited internet access and lack of remote learning technology. That explains why closing schools was the only effective preventive measure that was implemented. During COVID-19, the Internet and technology have been more readily available to schools and students, which has helped in offering other learning options, such as full remote and hybrid learning.

Public school districts in the United States have complete control over their educational affairs. They neither adhere to one organizational structure nor report directly to the federal government. Each school district is usually governed by an elected board of education that makes decisions by majority on policy, finance, hiring, and district-related issues. This research will explore the decision-making process followed by Wisconsin school districts to determine whether schools will open or remain closed and the online modalities and platforms to be used in case of remote learning. The study will also explore the effects of the number of local positive COVID-19 cases, the guidelines from the Centers for Disease Control and Wisconsin Department of Health Services, and mandates from state and local authorities on the decision-making process. The research findings will help show how school districts respond independently to the pandemic challenges and identify the individuals responsible for making COVID-related decisions. The study will contribute to the research on educational leadership by identifying the decision-making processes in these school districts and by offering recommendations on how to improve them in future health emergencies.

REVIEW OF LITERATURE

Large-scale influenza outbreaks and pandemics usually cause schools to close their doors to prevent diseases from spreading in the school community. The first waves of pandemic-related school closures in the United States happened in 1918 and 1919, when most urban communities closed public schools for extended periods (Stern et al., 2009). According to Navarro et al. (2016), more than 1,300 public, charter, and private schools in 240 communities across the United States closed during the spring wave of the 2009 H1N1 pandemic. In a study on school closures in the United States during the 2009 H1N1 pandemic, Klaiman et al. (2011) reported that school closings were considered a social distancing method and a nonpharmaceutical intervention strategy to slow the spread of the disease among the population. These closures were supported by evidence from the Centers for Disease Control that school closures can interrupt influenza spread (CDC, 2007). In Japan, closing the schools during H1N1's peak time effectively decreased the number of infected students, but the closures did not substantially decrease the total number of infected students (Kawano & Kakehashi, 2015). In Hong Kong, the government immediately closed all schools except high schools, which remained open, while those with confirmed cases were closed for 2 weeks (Wu et al., 2010). In England's West Midlands, schools were closed for an average period of 6 days based on independent decisions by local school authorities that determined the closing of schools based on three main considerations: policy, guidelines, and scientific evidence; health protection intelligence; and school-based reports. The local school authorities followed a risk-based approach to decision-making in deciding about closures, but public health officials and school leaders disagreed on which schools should close or not, the closure duration, and the mitigating measures to be used (Awofisayo et al., 2013). Kawano and Kakehashi (2015) indicated that there are two kinds of school closures: a proactive closure to decrease the spread of the virus among the population during the initial phase and a reactive school closure applied when many students and staff are infected with the virus. In the cases mentioned earlier, countries and school districts used proactive and reactive closure approaches to mitigate the rapid transmission of H1N1, which caused an estimated number of 60.8 million cases and 12,469 deaths in the United States alone (CDC, 2020).

An analysis of the 2009 H1N1 pandemic outbreak in the United States by Klaiman et al. (2011) found wide variation in rationales and decision-making authority for school closures, which led to inconsistencies among school districts' responses and contributed to a sense of uncertainty in the way local and state governments handled the health crisis. As an example of the inconsistencies in decision-making, Navarro et al. (2016) reported how Milwaukee mayor Thomas Barrett met with Milwaukee and Wisconsin health officials and CDC epidemiologists to develop an appropriate response to the city's H1N1 pandemic. However, he later overruled his health department's recommendation for a sweeping school closure order and reopened all closed schools to fend off the growing opposition from parents, media, and some city officials. Navarro et al. (2016) concluded that, by rejecting his health department's recommendations to

close the schools, the mayor removed the authority for issuing school closures from his health department and gave it to Milwaukee Public Schools. To propagate uncertainty, more local health departments around the country pursued school closure plans independently of CDC guidance, which contributed to the public's opposition and unwillingness to accept their decisions (Navarro et al., 2016), which highlights how politics sometimes trumped science.

In their study of the 43 most populated cities during the 1918 Influenza pandemic, Stern and his colleagues (2009) found four categories of municipal approaches to school closure. These included keeping schools open with daily medical inspections of students and closing schools with varied degrees of nonpharmaceutical interventions and cooperation between school officials and health authorities. The researchers concluded that widespread conflicts among municipal and government agencies on who has decision-making powers to close schools had exacerbated their efforts to contain the disease in U.S. cities during the 1918 pandemic and led to controversy and distrust in health officials and political leaders.

Researchers who studied school closures during the 2009 H1N1 pandemic were well aware of the benefits of school closures for the mitigation of the virus spread in the community. CDC reported in 2007 that school closure and social distancing are important components of community mitigation because schools and workplaces are transmission hotspots. However, the decision to close schools must take into consideration social and economic factors such as the impact of school closure on working parents and workplace absenteeism, which is the primary issue underlying many of the concerns related to the pandemic mitigation strategies, according to CDC. Furthermore, during the H1N1 pandemic, the benefits of closing schools compared with the economic costs of such interventions were not clearly understood by researchers who believed that the benefits of school closure depended more on the effectiveness of pharmaceutical measures (Stehlé et al., 2011).

Decision-making is an integral component of educational leadership because the work of leaders in educational organizations revolves around decision-making activities (Johnson and Kruse, 2010). The literature on decision-making is expansive and covers many fields and disciplines, but the first practical lesson drawn from the educational leadership literature is that principals and superintendents make daily decisions that impact their schools using different approaches (Hoy & Tarter, 2008; Polka et al. (2016); Shapiro & Stefkovich, 2016). Facing the challenges of closing schools during the H1N1 pandemic, educational leaders in the United States had to navigate unchartered territories and weigh their options while addressing health safety concerns and public demands for open schools. Their management of school closures was an "uncertain art," according to Awofisayo et al. (2013, p.637). To help manage the school closure decision-making process, Klaiman et al. (2011) suggested that decision-makers make their goal of school closing clear, and the measures should be modified based on scientific knowledge. They also need to clarify their legal and practical authority to close schools, expect uncertainty, and be flexible in policies and procedures. Awofisayo et al. (2013) recommended a

well-organized response strategy that includes a variety of community partners and stakeholders using a command center with clear leadership roles and defined responsibilities.

The review of research literature showed that school districts faced uncertainties and challenges when deciding on closing or opening schools during the 1918 Influenza and 2009 H1N1 pandemics. The literature did not address other options such as remote learning, hybrid format, or any other alternative to in-person school attendance. This gap in knowledge was likely due to the limited availability and non-affordability of the Internet and personal computers in school communities that were affected by the H1N1 pandemic. This study seeks to fill that gap by examining the decision-making process that public schools in Wisconsin followed during the COVID-19 pandemic to determine opening or closing of schools, offering remote or in-person learning, and postponing or resuming sports in addition to other extracurricular events.

METHODOLOGY

Research Design

A mixed methods approach was used in this study because "the basic aim of survey research is to describe and explain statistically the variability of certain features of a population" (Marshall & Rossman, 1989, p. 64). The research thesis was that Wisconsin district administrators' decision-making approaches during the COVID health emergency were more classical and shared than political and that they were primarily driven by the well-being of students and staff.

Sample and Data Collection

A survey was emailed to 422 Wisconsin district administrators, whose email addresses were retrieved from the Wisconsin Department of Public Instruction's directory of district administrators. Most of the invitees were superintendents, and some were district directors. Only 36 completed the IRB-approved Qualtrics anonymous survey, which represented 8.5% of the total population of the state's district administrators. Only 31 completed the interview questionnaire; 32 completed the demographic data questions. Survey completion reminders were emailed at 2-week intervals, and an anonymous consent form was also sent along with the survey. The sensitivity of the COVID-related issues and the dynamics of district and community reactions to COVID state mandates could explain the low participation rate.

The survey instrument used in this research project consisted of 35 Likert-scale questions, 11 open-ended interview questions, and 10 demographic data questions. Polka and his colleagues (2014) created the 35-question Problem-Solving and Decision-Making Survey, which was based on the seven decision-making and problem-solving approaches developed by Hoy and Miskel (2008). The reliability of the 35 questions of the Problem-Solving and Decision-Making Survey is .816, according to Cronbach's alpha measurement. Thus, the survey has construct validity based on the research of Hoy and Miskel (2008) and reliability in relationship to the decision-making and problem-solving approaches of contemporary superintendents (Polka et al., 2014). The seven decision-making approaches are defined below:

- The classical approach is the rational systematic means–ends analysis focused on optimizing organizational goals.
- The incremental approach is the successive search for reasonable alternatives to facilitate good decision-making.
- The garbage can approach consists of scanning and using previously identified solutions to solve problems.
- The shared decision-making approach empowers others to assist in finding solutions to problems meaningful to them.
- The satisficing approach consists of making decisions that are acceptable to most of those impacted.
- The mixed scanning approach involves broad ends and tentative means that focus on adapting decisions to policy guidelines.
- The political approach employs objectives that emerge spontaneously but are personally driven by the leader's need for power (Hoy and Tarter, 2008, p. 85).

Participants were also requested to answer eleven open-ended questions that the researcher constructed to elicit their perspectives on how they addressed the challenges the COVID health emergency posed in their districts. These questions were selected from various leadership questionnaires and were then modified to suit the research topic. The interview questions sought to identify the frequency and duration of school closures caused by the COVID-19 pandemic, the learning structures and modalities that were used during school closures and the factors that had impacted such decisions; the stakeholders considered when making decisions about school closings and the extent of their influence, the decision-making process that was followed and the priorities set when making decisions, and other district closure questions.

The interview questions were analyzed using Qualtrics Labs' TextiQ to examine the individual responses to each question with the goal of finding the key topics. After the examination was completed, the topics were imported, and their frequency was calculated to determine the preponderance of these topics in the interview responses. The topics or themes were then coded and analyzed using Marshall and Rossman's thematic method (1989). Coding was used to identify categories in the participants' responses which were organized into themes, which in turn were analyzed against the research questions.

The ten demographic data questions were based on the survey constructed by Hoy and Tartar (2008), which included (a) gender, (b) years of total educational experience, (c) years of administrative experience, (d) current position, (e) years in current position, (f) number of superintendencies held, (g) school district setting, (h) school district student population, (i) number of administrators in the district, and (j) number of schools in the district.

RESULTS

Data from the survey and demographics were analyzed using Qualtrics Stats iQ, and the responses from the interview questionnaire were analyzed using Qualtrics Text iQ. Using descriptive statistics, the data from the demographic questions showed that 26 of the respondents were superintendents (78.1%), one was both a principal and superintendent, and six were district administrators. Gender data showed that 21 (65.6%) were male and 11 (34.4%) were female, which was higher than the national average of 21.7% (American Association of School Administrators, 2006). The district setting results showed that 90.6% of districts were rural, and the rest were urban or suburban. The number of administrators who had been in their current positions for 1 to 3 years was 14 (43.8%), those with 4 to 10 years was 14 (43.8%), and the rest had more than 11 years of tenure in their current positions. The results indicated a high turnover rate for district administrators compared with the mean tenure for superintendents, which was 5 to 6 years (American Association of School Administrators, 2006).

Table 1. *Demographic Characteristics of the Respondents*

No	Demographic Characteristics	Respondents	
		Total	%
1.	Gender		
	Male	21	65.6
	Female	11	34.4
2.	Current Position		
	Superintendent	26	78.1
	District Administrator	6	18.8
	Principal/Superintendent	1	3.1
3.	School District Setting		
	Rural	29	90.6
	Suburban	2	6.3
	Urban	1	3.1
4.	Years in Current Position		
	1-3	14	43.8
	4-10	14	43.8
	11-17	3	9.4
	18-24	1	3.1
5.	Number of Superintendencies Held		
	1	19	59.4
	2	8	25.0
	3	3	9.4
	4	2	6.3

6.	**Years of Administrative Experience**		
	1-3	1	3.1
	4-10	5	15.6
	11-17	9	28.1
	18-24	14	43.8
	25-31	3	9.4
7.	**Years of Total Educational Experience**		
	4-10	1	3.1
	11-17	2	6.3
	18-24	7	21.9
	25-31	17	53.1
	32+	5	15.6

In terms of statistical correlation, several demographic variables showed a strong, statistically significant relationship among them. For example, the relationship between the variables "District Administrators' Years of Total Educational Experience" and "Years of Administrative Experience" were clearly significant at a P-value of 0.03. A more robust value of statistical significance (0.02) was found in the relationship between the variables "Years of Total Educational Experience" and "District Setting." This correlation is likely skewed toward rural settings, as 93.1% of rural district administrators had over 18 years of educational experience.

Using the seven decision-making models by Hoy and Miskel (2008) and the data scoring sheet by Polka and his colleagues (2014) (1 being lowest and 4 the highest), the results from the survey showed that Wisconsin district administrators' decision approaches scored higher in incremental (3.19) and classical (3.07) approaches. Scoring was conducted by transferring the numbers circled on the survey instrument to the appropriate categories, then totaling the scores for each category and dividing that number by 5 to determine the final score. Mixed scanning came third with 2.81. Shared decision-making and satisficing were above average with 2.68 and 2.66, respectively. The lowest decision-making models in terms of user frequency were garbage can (2.51) and political (2.2). These survey results indicated that Wisconsin district administrators preferred decision-making models that require "rational systematic means–ends analysis focused on optimizing organizational goals, and successive search for reasonable alternatives to facilitate good decision-making" (Hoy and Tarter, 2008, p. 85). They also seek to empower others to assist in finding solutions to problems meaningful to them, to make decisions that are acceptable to most of those impacted, and to involve broad ends and tentative means that focus on adapting decisions to policy guidelines. By contrast, these administrators did not favor decision-making approaches that consist of using previously identified solutions to solve problems and employing objectives that emerge spontaneously but are personally driven by the administrator's need for power (Hoy and Tarter, 2008).

Figure 1. *Decision-Making Use Frequency*
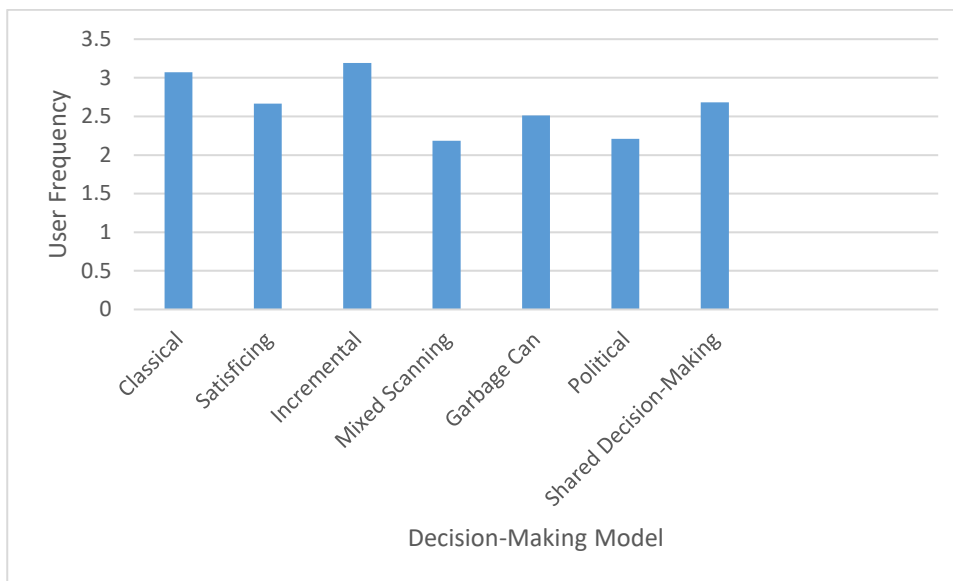
The results from the interview questionnaire revealed that all Wisconsin district administrators followed state mandates to close the schools but relied heavily on input from stakeholders before making any mitigation decisions or choosing any learning format. They prioritized the well-being of students, families, and staff when making such decisions. The primary factors that administrators took into consideration to decide on virtual or in-person learning included guidance from health authorities, number of infection cases, student learning, availability of technology, and community dynamics.

Using Marshall & Rossman's coding approach (1989) to identify categories in the participants' responses to the 11 open-ended interview questions, the major emerging themes were as follows: (1) Wisconsin district administrators' decisions on COVID-related issues depended on state mandates and were well informed by guidance from federal, state, and local health authorities; (2) students' well-being was the highest priority in making their decisions, and staff and parents were also considered as priorities in making those decisions; (3) stakeholders (health authorities, teachers, parents, boards of education, businesses, community) were almost always included in the decision-making process; (4) the district administrator or board of education initiated and involved the district leadership team in the decision-making process; (5) the main factor behind going back to in-person learning was student needs; (6) the learning modalities during the COVID pandemic were in-person, hybrid, and virtual; and (7) district administrators provided study packets to students without reliable internet connections and delivered meals to homes of eligible students.

Listed below are the seven themes followed by sample respondents' answers to the open-ended interview questions:

Theme 1 (Wisconsin district administrators' decisions on COVID-related issues depended on state mandates and were well informed by guidance from federal, state, and local health authorities):

The school board, public meetings, and parents of students were listened to, while considering scientific evidence for the final decision based on the CDC, Wisconsin DHS and Ashland County Health Department.

They [public health officials] were very influential. We presented them with data and recommendations with rationale. They provided feedback and insight. This approach was very successful.

Theme 2 (students' well-being was the highest priority in making their decisions, and staff and parents were also considered as priorities in making those decisions):

The Main consideration was the safety of the students. The main consideration was if we could get substitute teachers to fill in for teachers that were in isolation due to COVID 19

Parents of our younger students were our primary concern. Those students need to be in school. We did several community surveys with parents to gather information to help the administration and school board make decisions.

Theme 3 (stakeholders (health authorities, teachers, parents, boards of education, businesses, community)) were almost always included in the decision-making process:

We openly discussed the options in open session of the board meetings. When we thought we had a working model we held a public hearing to discuss what we thought would work and we took questions from the public concerning the details and the reasoning behind the plan.

Virtually all- parents and staff were surveyed to assist in developing plans in addition to a comprehensive "reopening committee" composed of staff, administration, doctors, public health, etc.

Theme 4 (the district administrator or board of education initiated and involved the district leadership team in the decision-making process):

We gathered data, worked with staff, conversed as an admin team, and presented solutions to the school board.

Administration made the big rock decisions, teachers and school sites operationalized for site and level and then turned back identified problems and solutions in that planning for district consideration if needed.

Theme 5 (the main factor behind going back to in-person learning was student needs):

After the end of the 2019–2020 school year, it was obvious that kids learn best with in-person instruction. That was one of the biggest learning lessons we gained from the closing. If kids aren't in school, they aren't learning. We needed to get them back in class.

Virtual learning did not work for most students and the academic assessments proved that to be true.

We went back to in-person learning for 2 reasons: First, students learn better in the regular classroom, and second, we have more than 50% poverty in our district, and both parents

needed to work and could not be at home with their children. we did not want children being left home alone and unsupervised for their safety.

Theme 6 (the learning modalities during the COVID pandemic were in-person, hybrid, and virtual):

We offered packets to younger students in the spring of 2019 and iPads and remote learning via the Internet for older students. In the fall of 2019 we offered iPads to all students and daily remote online learning to all.

When the State imposed mandatory school closures in the spring, we moved to all online/virtual instruction. We immediately began planning for the start of the 19–20 school year. We developed a comprehensive reopening committee composed of staff, public health, and doctors from the community. We developed a plan with cohorting at our elementary buildings allowing students to attend 5 days per week, in-person for the 19–20 school year. Our secondary buildings are much larger (over 1,000 students at the middle and high schools) which required us to implement a hybrid approach in which half of the student body attended Monday and Tuesday in-person while the other half attended Thursday and Friday in-person and were virtual/ off-site the remainder of the week. We utilized that approach until around March of 2020 when we moved to 4 days of in-person instruction 6–12, then finally 5 days of in-person instruction to end the school year. We also offered fully off-site/ virtual options for any student/ family interested in that approach for the duration of the year.

Theme 7 (district administrators provided study packets to students without reliable internet connections and delivered meals to the homes of eligible students):

Many of our families do not have access to reliable or "usable" Internet for virtual instruction.

We looked at food and childcare. We delivered food to families, and we partnered with local churches to make sure there was childcare.

These themes and respondents' statements corroborate the decision-making approaches taken by district administrators during the pandemic. For example, as the survey results demonstrate, none of the study participants' responses followed the political approach. On the contrary, their responses showed a high tendency to search for reasonable alternatives to facilitate good decision-making (incremental approach; theme 4) and a rational, systematic means–ends analysis focused on optimizing organizational goals (classical, theme 4). Their responses also showed an above-average focus on adapting decisions to policy guidelines (mixed scanning, theme 1). Additionally, they empowered others to assist in finding solutions to problems that were meaningful to them (shared decision-making, theme 3) and made decisions that were acceptable to most of those impacted (satisficing, theme 2). In the face of the terms of the new challenges COVID-19 posed, these administrators couldn't rely entirely on previously identified solutions to solve the emerging problems. That could explain the low frequency of the garbage can approach.

DISCUSSION

The analysis of Wisconsin school district administrators' perceptions of their responses to the COVID pandemic showed a level of uncertainty regarding school openings and closures similar to the responses of school districts during the 2009 H1N1 pandemic outbreak in the United States, as Klaiman et al. (2011) reported. However, there was consistency in adhering to state and local mandates that governed school closures, masking, social distancing, and other health measures. The use of remote learning during the pandemic peak period was dominant across the districts, but interdistrict variations in handling COVID mandates varied between rural and urban districts, with rural districts lessening the pandemic restrictions and opening schools for in-person learning long before the urban districts.

In terms of decision-making during the COVID period, the research results show that Wisconsin district administrators faced similar challenges as districts during the 1918 Influenza and H1N1 pandemics. Educational leaders in Wisconsin had to navigate unchartered territories and weigh their options while addressing health safety concerns and public demands for opened schools. Their management of school closures was an "uncertain art," according to Awofisayo et al. (2013, p. 637). They acted upon the relevant knowledge proposed by Klaiman et al. (2011) that decision-makers should make their goal of school closing clear, and the measures should be modified based on scientific knowledge. They also used a well-organized response strategy that included a variety of community partners and stakeholders using a command center with clear leadership roles and defined responsibilities as recommended by Awofisayo et al. (2013).

This study showed that the decision-making process followed by public school districts in Wisconsin during the COVID-19 pandemic was primarily rational (incremental and classical approaches) and corroborated Polk and his colleagues' findings that "reinforced the significance of the Hoy and Tarter (2008) decision-making and problem-solving model in that the incremental and classical approaches are most frequently used" (2014, p.14). In addition, the study demonstrated that the administrators used the political perspective (Bolman & Deal, 2017) to navigate the pressures imposed by the state and local health agencies to close the schools during the pandemic's peak in the 2020–2021 academic year.

The themes that emanated from the administrators' responses to the open-ended questions showed that their actions during the pandemic were aligned with the eleven Wisconsin Administrator Standards (Wisconsin Department of Public Instruction, 2021). For example, the district administrators' decisions prioritized student and staff needs for health and safety (Standard 5); they engaged families and community stakeholders in promoting children's academic success and well-being (Standard 8); and they managed school operations and resources effectively to provide students and staff with the technology that facilitated remote and hybrid learning.

Conclusion

This research article explored the decision-making models followed by Wisconsin school administrators to determine whether schools open or remain closed and the online modalities

and platforms to be used in case of remote learning. The study also explored the factors impacting their decision-making process. The research findings have broad implications for Wisconsin and other states' districts on how to respond proactively to future health emergencies. These include using a variety of decision-making models that invite collaboration and involvement of many stakeholders, prioritizing student well-being and learning in those decisions, and following guidance from health authorities.

The study has demonstrated that district administrators in Wisconsin favored incremental and classical approaches to decision-making when dealing with state health mandates. The decisions on COVID-related issues were well informed by guidance from federal, state, and local health authorities. They also prioritized the well-being of students, families, and staff when making such decisions. Examples of this prioritization included the use of in-person, hybrid, and virtual learning modalities, providing study packets to students without reliable internet connections, and delivering meals to the homes of eligible students. The study also showed that the district administrator or board of education initiated and involved the district leadership team in the decision-making process.

The current COVID situation presents many challenges for district administrators across the country. By understanding how Wisconsin district administrators make decisions on closing or opening their schools and the learning modalities to be implemented during closures, and by replicating these best practices in other Wisconsin school districts, we can develop a better health emergency preparedness program in Wisconsin schools and throughout the country. Such an effort would expand and strengthen the districts' partnerships with public health authorities to mitigate the dangers of any future health emergency.

Recommendations

To explore opportunities for further research on this topic, the author would like to recommend the following:

- This study was limited to Wisconsin school district superintendents. Expanding the study to include principals would increase the number of respondents and would include a more diverse population in terms of gender and racial background.

- One-on-one interviews using in-person or virtual modalities would provide a much deeper insight into the decision-making models used by school district administrators and report in detail the challenges they encounter when dealing with public health emergencies.

- Conducting a comparative study of multiple states' policies dealing with pandemic responses in school settings would provide opportunities to examine the approaches of state educational agencies in determining health mandates affecting school closures.

Limitations

- This study explored the decision-making approaches used by Wisconsin district administrators when addressing COVID-19 pandemic-related school closures. It also

examined the factors that impacted their decisions to close the schools or keep them open, the stakeholders considered when making these decisions, and the learning formats and platforms used during school closures. However, there are several limitations in this study that warrant mentioning:

- This study was limited to Wisconsin school district superintendents only.
- Most school districts (90.6%) participating in this study were in rural areas.
- Decision-making approaches used in this study were limited to the seven models developed by Hoy and Miskel (2008) and the data scoring sheet created by Polka and his colleagues (2014).
- Pandemic-related health mandates and restrictions surrounding school visits and in-person meetings in Wisconsin districts limited the scope of the research instruments to online surveys.

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