

In the Aftermath of Hurricane Ike: School Principal's Perceptions and Concerns

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Since 2005 principals in school districts in southeast Texas have become increasingly aware of the traumatic aftermath of hurricanes. Several hurricanes including Hurricanes Rita in 2005 and Ike in 2009 left significantly devastating marks on communities including loss of personal property and school district property. During Hurricane Ike, a 25-foot sea water surge rolled over Sabine Pass, Texas. Five months later Clark (2009, February 22) noted that the community was still not back to normal. Clark noted a significant impact on students in the Sabine Pass school district including the basketball team who faced many challenges because Hurricane Ike not only destroyed the school gym and but destroyed or significantly damaged their homes. This paper discusses school principals' perceptions of the effect hurricanes had on student learning and school safety.

Review of Literature

Background/Recent Hurricanes

On September 13, 2008, Hurricane Ike made landfall on the Texas coast between Galveston and Houston, Texas at about 2:00 a.m. Tropical force winds raged in a huge band from Mobile, Alabama to Corpus Christi, Texas ("In Ike's Wake," 2008). Because it was labeled a "Category 2" hurricane, no one believed its effects would be so devastating, especially Southeast Texans who had just returned from a mandatory evacuation caused by Hurricane Gustav only one week before with little damage.

Ike's strongest winds measured only one hour less than a "Category 3" strength hurricane of 111 miles per hour. This storm was enormous, measuring over 500 miles across. Ike violently agitated coastal waters and devoured the southeast Texas coast with strong surges likened to a "Category 4" storm. The storm surge caused water to rise rapidly leaving some coastal residents clinging to their roofs waiting for rescue at first light the next morning. Only one in five homes was left standing in Crystal Beach, Texas, with most of the remaining homes severely damaged and unlivable ("In Ike's Wake," 2008).

In contrast to Hurricane Rita's devastating winds, Ike's major damage was caused by severe flooding. Mixtures of mud, sewage, dead sea life, and toxic chemicals from surrounding industrial plants remained ("In Ike's Wake," 2008). Moore (2009, February 22) reported that Ike changed life at Bolivar, Texas forever; however, the indomitable spirit of the people remained as reflected in their ability to celebrate and watch a Mardi Gras parade on February 21, 2009 in the midst of debris and wreckage left by Hurricane Ike.

Only three short years ago, Hurricane Rita made a direct hit on Port Arthur and Beaumont, Texas on September 24, 2005. With winds measuring 120 miles per hour, Rita was classified as a "Category 3" hurricane. Over 1.3 million people were ordered to leave under a mandatory evacuation to escape the storm. Following the storm, residents of the area were subjected to enforced curfews and quarantined from returning by the National Guard. Rita caused extensive property damage that required FEMA to install blue tarps on over 20,000 roofs and lease over 4,000 trailers to homeless families ("Rita Captured," 2005). Rita caused extensive damage to southeast Texas with a disaster area the size of West Virginia. Many individuals required a long time return to normal conditions ("One year since Hurricane Rita," 2006).

School Crisis

Lerner, Lindell and Volpe (2006, p. 211) defined a crisis as...”a traumatic event that seriously disrupts our coping and problem solving abilities. Learner et al. (2006) suggested that a school crisis could change the entire culture leading to feelings of vulnerability and helplessness in some individuals.

Schonfeld, Lichstein, Pruitt, and Speese-Linehan (2002) argued that a school crisis could cause emotional turmoil among students, faculty, and staff in the form of alarm, confusion, and even despair. They noted that failure to address emotional turmoil could result in a long-lasting decline of academic progress, while unresolved grief could precipitate even more serious psychological conditions throughout the school resulting in both low morale and a negative school climate.

A common effect of crisis on school leaders was disorientation as leaders attempted to minimize the impact through denial of the incident and its subsequent effects. Furthermore, an underlying reason for rationalization of leadership responses could be explained by leaders who focused upon educational goals in order to maintain an illusion of normalcy. Additionally, a potential consequence of leader disorientation resulted in a diminished sense of safety and an increased sense of alienation (Schonfeld et al., 2002).

Safe School Legislation

The No Child Left Behind (NCLB) act implemented in 2002 required states to mandate a state-wide policy including safety plans. School safety plans must include security procedures, a student code of conduct, and a crisis management plan for responding to emerging events on school grounds (Wright, D., Wright, P., & Heath, 2004).

The Safe Schools Act of the Texas Education Code (2007) marked the first legislative requirements for districts to provide and implement a multi-hazard emergency operations plan. For example, this act required emergency operation plans to provide training to district employees, emergency drills, measures to ensure coordination with local agencies, and implementation of security audits.

Preparedness

Collins (2003) described two school tragedies in American history: the New London, Texas school explosion in 1937 and the Chicago, Illinois school fire of 1957. Collins concluded that individuals failed to perceive danger because of a false sense of security within a school building where activities were viewed as routine and normal. This author noted that in these instances, lives were lost because school officials failed to prepare for emergencies and a lack of preparedness appeared common. Additional safety concerns, such as toxic exposure, gas leaks, weather, and natural disasters were noted by Trump (2007).

Recognizing school administrators’ limited amount of time, Brumer and Lewis (2005, pp 22-23) developed a list of 10 school safety behaviors. Several safety behaviors appeared relevant for hurricane preparedness as follows: (a) do not underestimate the value of strategic supervision; (b) do not assume, as the principal, that you will be present or in charge during an emergency; (c) do not assume that local emergency service providers will be able to provide immediate assistance during a school emergency; (d) do not fail to review the school’s emergency response plan with all faculty and staff periodically throughout the school year; and (e) do not assume that parents believe that the school has done everything possible to create a safe school. These authors noted that strategic supervision offered the greatest positive impact given the limited human resources available during a crisis.

Trump (2007) found that fill-in-the blank crisis plans were ineffective. This author suggested that full-scale drills, although important, should be carefully weighed against the commitment of time and labor. Relationship building, emergency planning, promoting collaborations and partnerships, and a culture of safety were most effective (Trump). Clarkson and Pelton (2002) argued that school administrators were responsible for budgeting district resources in a manner that ensures student safety and thereby achievement. Clarkson and Pelton (p.4) stated “safe school planning is a systematic process that should be woven into the culture of a school rather than addressed by special add-on programs.”

The Study

A survey was conducted to investigate school principals’ perceptions of the impact of Hurricane Ike.

Sample Characteristics

Fifty-three Texas school principals responded to an online survey. Sixty-six percent reported being a principal between one and five years, twenty-five percent reported being a principal between 6 and 15 years, while eight percent reported being a principal for more than 20 years. The majority of the respondents were White whose ages ranged between 31 and 60 years of age.

Findings

Participants were asked to rate statements using a five-point Likert-type scale with one (1) showing a decrease and five (5) showing an increase in the behavior identified in the 20 statements or question. Based on their perceptions, participants were asked to rate if students' behaviors showed an increase or decrease upon returning to school after Hurricane Ike. The responses related to students' behaviors were separated into three categories and are reported in Tables 1, 2, and 3, found in Appendix 1. The three categories of students' behaviors included: basic needs, academic focus/classroom behavior, and student social interactions. Perceptions of safety needs related to training for faculty and staff and compliance with safety regulations are reported in Table 4, found in Appendix 1. Written comments or suggestions related to the survey statements are reported under the qualitative results section.

A majority (92%) of school principals in southeast Texas who responded to this survey reported an increase in homelessness for students in their schools. A majority (94%) of the participants reported a decrease in student attendance; or said another way, these principals reported an increase in student absences from school. A majority (98%) of the participants observed a decrease in parental involvement in their child(ren)'s school activities immediately after the hurricane. A decrease in students' emotional stability during school hours and school activities was reported by a majority (96%) of the participants. Table 1 shows students' behaviors related to basic needs as perceived by the school principals who participated in this study.

The second category of student behavior reported by participants was students' academic focus and classroom behavior. A majority of participants (98%) reported a decrease in their students' ability to focus on academic and instructional activities. A majority (98%) of the participating principals noted that students were unable to work independently. A decrease in disruptive behaviors in general and behaviors that required behavioral referrals or disciplinary infractions in the classroom was observed by a majority (90%) of participants. A reduction in fighting in school was reported by 94% of the participants. Students were able to maintain their focus on extra curricular activities as reported by 90% of the participating principals who observed an increase in student interest in extra curricular activities. Table 2 shows participating school principals' perceptions of students' behaviors relative to academic focus and classroom behavior.

The third category of student behaviors reported by school principals was students' social interaction with peers, school administrators, and faculty. A majority (98%) of participants noted an increase of students' interaction with school administrators. A majority (96%) reported an increase in students' interaction with school counselors. The majority of participants (94%) reported that students' responsiveness to teachers decreased, corresponding with the decrease in students' focus on academic and instructional activities. Immediately after the hurricane, students turned to their peers for support. Specifically, 96% of the participating principals observed that many students increased their reliance on and interactions with their peers following the impact of Hurricane Ike. Table 3 shows principals' perceptions of students' behaviors related to student social interaction.

Two safety issues emerged from this survey. The participating principals' perceptions of safety concerns and focus on facilities management increased immediately after the extensive damage inflicted by Hurricane Ike. All of the participants reported an increase in safety training for faculty and staff. All participants noted an increase in compliance with safety regulations. Because of the significant physical damage to property and buildings, all participants reported a decrease in class facilities and resources at their schools. Table 4 shows principals' perceptions relative to safety and facilities management concerns.

Qualitative Findings

Participants were invited to address their concerns and to make recommendations for improvement for schools to be responsive after a natural disaster. Four themes emerged from the principals' statements:

concern for students, concern for school safety, preparedness and training concerns, and frustration with state and federal issues. Selected quotes representing each of these areas are included below.

Concern for Students

Participants expressed concern about students' ability to recover from the hurricane that impacted behavior in the classroom. Additionally, the participating principals commented on students' basic needs and general welfare:

"Regarding Ike we had to start and restart school three times within a very short span of time. This was an unnerving experience for the students, resulting in a persistent malaise from which the students may just now be emerging, with predictable effects on academic achievement. It was easy to 'get back to normal' once but the need to do it three times really set our students back. The students have really lacked focus during the first semester."

"The state would not penalize [a] campus if their AEIS rating dropped due to natural disasters and did not require the make-up of so many days – many educators and parents use their holidays to rebuild homes and students help in the process or need the brief time off for a stress relief, but instead provide districts funding to offer summer programs for those students that were not able to close academic gaps due to the disaster."

"A reintroduction into normal routine with an emphasis on identifying struggling students."

"Homeless children. Unfed children. Disease form lack of clean water or ability to boil or purify water. Overall general well being of children outside or school. We can feed, clean clothes, and provide showers at school, but what are they getting at home when power and utilities are out."

Concern for Safety/Preparedness

Participating principals wrote the following statements concerning school safety and the ability to keep students, their families, and the community safe:

"I am concerned about the safety of the buildings used for shelters."

"That we may get caught at a time when we cannot get our students home safely."

"The safety of students and community in the area affected by the disaster."

"Major concern on advanced warning systems so that we are informed well in advance of any possible disasters and can prepare to evacuate to a safer area."

Several participating principals commented about the ability for schools and communities to be prepared specifically for natural disasters, such as hurricanes, and the impact being prepared has on children.

"Lack of preparedness. Our district lies along the coast of South Texas. A situation very similar to Ike could occur in our community."

"Continue to work on preparedness. Returning from a hurricane needs to promote an air of calmness and routine...students work best when the adults in charge illustrate 'control' of the situation."

"Having as much as possible-prepared to withstand another disaster without losing as much vital resources."

Training Concerns

Participating school principals identified training needs for both adults and children through the following statements:

"Increase training on emergency preparedness in case of the disasters."

"Training...what to expect after a natural disaster. How to prepare children before, during, and after; discussion questions etc."

"I would like to see more opportunities for staff development relating to school disruptions relating to natural disasters."

"To educate adults."

- “Place emphasis on learning coping skills!”
- “Better preplanning;”
- “To educate students how to adapt and overcome.”

Frustration about State and Federal Issues

Some respondents expressed frustration with state requirements and perceived lack of state concern as follows:

- “Meeting the Texas requirements for testing when school has been out of session due to a natural disaster and it is unrealistic to make up all days missed and given that a large population are now homeless.”
- “The lost instructional days and the push to cover material before the testing begins is one of the most significant stressors on campus. I am concern[ed] for the safety and well-being of my students and staff.”
- “Texas Education Agency be more understanding of what actually occurs in disaster areas after a major storm like Ike or Rita. Not one single representative from this agency toured the destruction of SETX after Ike.”
- “More federal and state funding. Later start date to avoid hurricane season.”
- “Encouragement from the state of always be prepared for the unexpected.”

Conclusions

This study used online survey methodology and qualitative reflections to examine the perceptions of 53 Texas principals following the aftermath of Hurricane Ike. The majority of participants were White school principals with experience ranging from one to five years.

Four major areas of concern emerged from this study: concern for student welfare, concern for school safety and preparedness, lack of training, and lack of support from the state agency along with funding support. The majority of these principals appeared concerned about student homelessness and decreased daily school attendance. Other areas of concern included decreased student emotional stability and decreased academic focus and learning. Academic achievement and state testing requirements appeared a real concern for some who noted more time to get back to normal may be needed for students as well as support for summer programs to fill in learning gaps caused by the hurricane. Principals' concern about decreased student emotional stability appeared to be supported by such authors as Schonfeld et al. and Speese-Linehan (2002) who noted emotional turmoil among students, faculty and staff following school crisis.

Some of the participating principals expressed concern about the safety of buildings used for shelters, lack of advanced warning systems, and a lack of hurricane preparedness in general. Authors such as Collins (2003) and Trump (2007) supported concern about schools having a false sense of security and not being prepared for disasters. Brumer and Lewis (2005) made suggestions for school administrators concerning safety behaviors and reiterated the value of strategic supervision when there were limited resources available in crisis situations.

It may be helpful to adhere to the advice of Trump (2007) and emphasize relationship building and collaborative partnerships in emergency planning. Further, Clarkson and Pelton (2002) noted that emergency planning was a continued process that should be part of a schools' culture rather than used only for special add-on programs.

Training issues appeared to be a concern for some respondents. Several requested additional training on emergency preparedness. These principals wanted to know what to expect during and after disasters as well as having coping skills specifically taught. About half of the respondents noted that faculty and staff safety training increased in the aftermath of the hurricane. About one-third of the principals noted that safety regulation compliance also increased in the hurricane aftermath, suggesting an increased awareness of the value of both training and compliance.

Some of the principals appeared frustrated or perhaps angry about the lack of perceived support given by the Texas Education Agency. Principals appeared to be concerned about meeting state accountability requirements after the hurricane disruption. Lack of funding to meet additional tutoring or summer school

for students experiencing significant achievement gaps because of inability to focus and learn after the hurricane was another expressed concern.

Recommendations

The following are recommendations based on the survey responses of school principals who experienced a natural disaster’s impact on their students, faculty, and school facilities.

1. Because of the small number of principals, the researchers recommend replication of this study encompassing a larger geographic area and a larger number of participants.
2. An investigation of the coping skills used by school administration and faculty after a hurricane may be beneficial in the development of training for preparedness for such disasters.

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Appendix 1

Table 1

Principals’ Perceptions of Student Behavior Issues: Basic Needs N = 53

Student Behavior: Basic Needs			
Behavior	Increase	Decrease	% Participants
Homelessness	√		92
Daily attendance		√	94
Emotional stability		√	96
Parental involvement		√	98

Table 2***Principals' Perceptions of Student Behavior Issues: Academic focus/Classroom Behavior N = 53***

Student Behavior: Academic Focus/Classroom Behavior			
Behavior	Increase	Decrease	% Participants
Academic focus		√	98
Working independently		√	98
Behavior referrals/disciplinary infractions in the classroom		√	90
Fighting in school		√	94
Referrals for disruptive behavior		√	90
Interest in extra curricular activities	√		90

Table 3***Principals' Perceptions of Student Behavior Issues: Student Social Interaction N = 53***

Student Behavior: Student Social Interaction			
Behavior	Increase	Decrease	% Participants
Interaction with school administrators	√		98
Responsiveness to teachers		√	94
Interaction with school counselors	√		96
Social interaction with peers	√		96
Responsiveness to peers	√		96

Table 4***Principals' Perceptions of Safety and Facilities Management N = 53***

Safety and Facilities Management			
Behavior	Increase	Decrease	% Participants
Class facilities and resources		√	100
Faculty/staff training	√		100
Safety regulation compliance	√		100