

First Responders in the Classroom: Triage Training for Teachers to Respond to Students after a Natural Disaster

Nancy Leffel Carlson, Pamela E. Monk, E. Jane Irons, Carlo P. Walker
Lamar University

The purpose of this study was to investigate classroom teachers' perceptions of the impact of a natural disaster, such as a hurricane, on students' behaviors in the classroom. Teachers became the first responders to students when they returned to classrooms after evacuation following Hurricane Ike. Teachers made decisions and demonstrated appropriate actions in the classroom to support children traumatized by the emergency evacuation and eventual return to destruction.

Literature Review

Background

Children, teachers, and school buildings in Southeast Texas have been impacted by several significant hurricanes in the past four years. Hurricane Rita in October 2005 caused a mandatory evacuation of over 1.3 million people to escape the storm's destruction and devastation ("Rita Captured", 2005). In September 2008, extensive damage was caused to personal property and school buildings over a 500 mile area because of the sea surge and "Category 3" winds from Hurricane Ike ("In Ike's Wake," 2008). Recovery and return to normal conditions from such devastation can take a long time ("One year since Hurricane Rita," 2006).

Teachers affected both personally and professionally continued to rebuild and adjust to the aftermath of Hurricane Ike months later in the spring of 2009. Murray (2009) reported that classrooms, school facilities, and supply warehouses were demolished by the storm resulting in a void of teaching materials and curriculum resources. Communities and schools from as far away as Illinois provided support and donated over \$30,000 in supplies and teaching materials to schools in Galveston. Bridge City and Sabine Pass, coastal communities in Southeast Texas devastated by Hurricane Ike, received reference materials, bulletin board supplies, gently used books, clothing, and money raised by children from schools and communities over 800 miles away (Murray). Murray reported that educators across Texas adopted "sister schools" and copied curriculum materials in language arts, reading, math, science, and social studies to assist in maintaining teaching and learning efforts.

Effects of Tragedies at Schools

A school crisis could change the entire culture of a community leading to feelings of vulnerability and helplessness in some individuals (Lerner, Lindell, & Volpe, 2006). Lerner et al. (p. 211) defined a crisis as "...a traumatic event that seriously disrupts our coping and problem solving abilities." School crises, such as the Chicago school fire in 1958 and the explosion of the New London School in east Texas in 1937, sickened and caused trauma that haunted the communities for years. These tragedy forced schools and communities to review their emergency plans and prepare for the unexpected (Collins, 2003). Collins reported on the hurricane of 1900 that destroyed numerous homes, city and school buildings, and took over 6,000 lives in Galveston, Texas because community members were unprepared and lulled by a false sense of security.

Students, faculty, and school staff have had long-term emotional impacts from a school crisis. Failure to address emotional turmoil from a school crisis negatively impacts academic progress and could result

in serious emotional and psychological impact to children and adults (Schonfeld, Lichstein, Pruitt, & Speese-Linehan, 2002).

Effects of Tragedies in the Classroom

Total populations have been impacted by disasters such as hurricanes. Bender and Sims (2007) described the effects Hurricane Katrina, a population-wide tragedy (PWT), had on school children in New Orleans. Children disrupted and displaced by emergencies or disasters must receive support in their educational efforts and their emotional trauma eased. Bender and Sims suggested ways teachers could support children in recovering from a disaster: teachers should (a) observe and understand emotional instability on the part of the children, (b) understand that students' insecurities may impact individuals and spread throughout an entire classroom, and (c) understand that emotional trauma may increase displays of inappropriate behaviors such as acting out, anger, and (d) regression in developmentally appropriate behaviors.

Symptoms of depression were common in children impacted by disasters and tragedies. Crundwell and Killu (2007) suggested that children with depression negatively impacts academic, cognitive, and interpersonal relationships. A variety of teaching strategies and accommodations were necessary to support academic achievement and emotional stability for children with depression. Instructional strategies included modifying student work to meet individual student's needs, teaching problem-solving skills, increased opportunities for social interaction with peers, increased opportunities for frequent communication with peers, and clearly established routines and expectations (Crundwell & Killu).

Davis (2006) reported on lowered test scores from students displaced by Hurricanes Rita and Katrina. State officials in Louisiana determined to include displaced students in accountability measures instead of seeking exemption waivers with the understanding that these students had suffered trauma and were trailing behind other students. Georgia and Texas requested exemptions for transfer students displaced by Katrina to take pressure off both the students and teachers. Districts in Georgia, Texas, and Mississippi educated displaced students in shifts, held before- and after-school tutoring, and set up donation centers in schools to provide food and clothing to students and their families (Davis).

Bender and Sims (2007) recommended a three part school safety plan to support students and communities recovering from trauma and disasters. The three sections of the safety plan were: readiness, response, and recovery. The readiness section recommended guidelines for crisis situations to designate who should provide information about the disaster to students, recommended regular practice and drill for all participants, and recommended intensive drills for first responders and crisis teams. The response section included implementing the plan and providing for physical and emotional support to students. The recovery section included creating normalcy in classrooms through established routines and structure, and fostering interagency cooperation for efficient delivery of community services (Bender & Sims).

The Study

A survey was conducted to investigate classroom teachers' perceptions of the impact on students' behavior in the classroom after a natural disaster such as Hurricane Ike.

Sample Characteristics

Seventy-three Texas classroom teachers responded to an online survey. One fifth (or 21%) of the participants had 5 years or less experience teaching in a classroom. Sixteen percent taught between 5 and 10 years. Thirty-four percent of the participants had between 11 and 20 years teaching experience. The most experienced teachers (29%) had over 20 years in the classroom. The majority (86%) of respondents was White between 41 and 60 years of age while fewer than 10% of the respondents were young, between the ages of 20 and 30 years old.

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 questions. 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.

Classroom teachers who responded to this survey observed an increase in homelessness for children in their classrooms accompanied by a reduction in daily attendance, emotional stability, and involvement by parents. Almost all participants (97%) reported an increase in homelessness for students in their schools. A majority of the participants (92%) reported a decrease in daily attendance, or an increase in absences, for students in their classes. Almost all participants (99%) reported a decrease in parental involvement in their child(ren)'s classroom activities in the months following Hurricane Ike. A decrease in students' emotional stability during school hours and school activities was observed by the majority (or 94%) of participating classroom teachers. Table 1 shows students' behaviors related to basic needs as observed by classroom teachers who participated in this study.

The second category of student behaviors reported by participants was students' academic focus and classroom behavior. Participating classroom teachers observed a decline in their students' ability to focus on academic and instructional activities as well as a decrease in their students' interest in extra curricular activities. Approximately 90% of participants reported a decrease in their students' ability to focus on academic and instructional activities. Almost all participants noted that students were unable to work independently. Students demonstrating an increase in challenging behaviors in classrooms including fighting, disruptive behaviors, and referrals to administrators because of disciplinary infractions was reported by over 80% of the participating teachers. Table 2 shows participating teachers' perceptions of students' behaviors relative to academic focus and classroom behavior.

The third category of student behaviors reported by participants was students' social interaction with peers, school administrators, and teachers. The majority of participants (86%) reported that students' interactions with classroom teachers decreased, while interactions with all other groups at school increased. The decrease in students' interaction with classroom teachers corresponds with the decline in academic focus and increase in disruptive behaviors reported above. The increase in social interaction with peers corresponds with the students' decline in ability to work independently noted above. Table 3 shows participating classroom teachers' perceptions of students' behaviors related to student social interaction.

Two safety issues in school buildings and classrooms emerged from this survey: concerns about faculty training and condition of facilities, including buildings and instructional resources. The majority (over 90%) of participating classroom teachers increased their perceptions of the need for compliance with safety regulations and the condition specifically of their own classrooms, curriculum materials, and instructional resources after the extensive damage inflicted by Hurricane Ike. Over 90% of the participants observed an increase in faculty training immediately after Hurricane Ike. Because of significant physical damage to school property and buildings, almost all participants reported a decrease in the condition of classroom facilities and instructional resources at their schools. Table 4 shows participants' perceptions of safety and facilities management at their schools.

Qualitative Findings

Participants were invited to comment and make recommendations for improvement so that classroom teachers could effectively respond to students after a natural disaster. Four themes emerged from the participant's statements: concern for students, concern for school safety, concern for preparedness and training, and frustrations with state and federal issues. Selected quotes representing each of these areas are included below.

Concern for Students

Participating classroom teachers expressed concern about their students' ability to recover from the hurricane and the impact it had on their behaviors in the classroom. Additionally, the participants commented on students' basic needs and general welfare:

“[My concerns are] safety, food, clothing, shelter, emotional stability, ability to focus on anything other than getting their lives back to normal.”

“[I see] having a great number of students in alternative housing has placed them in stressful conditions. A natural disaster can force parents to spend money that they had saved for students to go to college on repairing or rebuilding their home.”

“We are unprepared for the emotional feelings of our students and don’t always know how to talk to them about or listen to their feelings, hurts, problems, [and] challenges.”

“Students are generally more upset when the weather gets bad. Fear is greatly increased even on simple rainy days. Worry about things at home and where [their] parents/caregivers are increased. On days when the wind blows, worry is apparent.”

“My one concern would be the emotional impact the natural disaster would have on the students. [I see] their fear of not seeing their friends, of not hearing from other family members, and the general panic that life would not be the same again, if ever.”

“[I see] financially disadvantaged students are overlooked in regards to meals, basic needs, and educational needs due to loss.”

“[I see] loss of school days due to the natural disasters. We were very, very far behind when we were able to finally return to school. When we were hit by Hurricane Rita, there were a lot of students who had no homes, no regular food supply, etc. This caused a lot of problems.”

“[I am concerned about] the time lost in the classroom. I notice each day that I teach that my students are not developmentally where other students were in the past.”

“[I see] the emptiness that students [are] faced with [in] their home and school environments. They are still recovering from the past hurricane and [are] now faced with this new disaster.”

“The anxiety experienced by students during evacuation, [and] trauma when returning to damaged facilities and economic hardships many face while trying to not make it public knowledge how much their family suffered.”

Concern for Safety/Preparedness

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

“[I am concerned about] parents who ignore mandatory evacuations and keep their children at home with them.”

“I want my students to be safe at school. I am also concerned for my own children at their schools if there were any type of natural disaster.”

“[I think] making the decision to close the schools earlier so we can evacuate before the bumper to bumper traffic hits!”

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

“We don’t have a regional [disaster] plan in place. If the schools in Region 5 could coordinate recovery goals before the next disaster, we might be more efficient.”

“[I am concerned about] early preparation...school being dismissed in a time that would be conducive to all getting ready to evacuate.”

“Communication is the key! Every school district in a certain radius of each other needs to be on the same page as far as whether or not classes are to be held.”

“Send out information, tools, [and] ways for teachers to take natural disasters and turn them into a teaching tool and a way of learning not only about the disaster itself, but the ways of life and life lessons that you can learn by learning to cope and deal with a disaster itself.”

“I recommend that we have a hard and fast rule for evacuation and if that standard is met, then an evacuation is called. Currently, the decision is left up to superintendents and various other people that have little or no expertise. My wife and I work in two adjoining school districts and they both have different criteria when judging a

hurricane's path. Some people are willing to take greater risks with their children. Some administrators are willing to take great risks that I would not take with my children."

Training Concerns

Participating classroom teachers identified training needs for both adults and children through the following statements:

"I think that students should be more informed on what to do and when."

"I think routine drills as well as safety instruction is essential to being prepared for any type of event."

"I would like to see a program about weather that doesn't include drills. The drills frighten younger students more now and cause a lot of insecurity."

"[We need] in-school training from counselors [to meet students' needs]."

Frustration about State and Federal Issues

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

"[I am concerned about] the inconsistency in the FEMA system. Some are helped immediately and others are still waiting 5 months later."

"[I am concerned about] the promptness of receiving aid and it going to the most devastated areas first."

"[I see] the emotional stress on teachers as well as students: Texas Education Agency is slow to respond to the needs of students and teachers' concerns about TAKS testing, scores, [and] standards. There is really no way to make up for a month of lost instruction time or the increase in absences of displaced students."

"There was such a concern about having to make up missed days that I feel like our safety and our family's opportunity to leave town was jeopardized a bit."

"[I think there should be] flexibility in the TAKS calendar or waivers for districts where 80 to 90% of students and staff have lost their homes."

"FEMA should not be changing case workers in the middle of cases [and] having to tell 3 different people where to set up the FEMA trailer – that is just a plain breakdown of communication!"

"State and local agencies should do what is in the best interest of the residents and not worry about any bad press or backlash from a decision to order an evacuation."

Summary and Conclusions

This study used online survey methodology and qualitative reflections to examine the perceptions of 73 classroom teachers from Southeast Texas about students' behaviors following the severe damage and disruption of Hurricane Ike. The majority of participants were White teachers between the ages of 41 and 60 with more than 10 years experience in the classroom.

Four major areas of concern emerged from this study: concern for student welfare, concern for school safety and preparedness, training needs for teachers and students, and a lack of support from the government agencies. Teachers were the first responders and observers of students' behavior in their schools. Participating classroom teachers observed students who had decreased emotional stability with a corresponding increase in disruptive behaviors in the classroom. Many students and teachers were anxious about the total destruction of their homes which caused families to become homeless. School attendance became less important, consequently students were absent from school more often.

Participating teachers were concerned about the general welfare of their students and the ability of families to obtain basic needs such as food, shelter, and water. Participating teachers noted that families, and in some cases themselves, were under financial stress because of repairs needed to homes, the loss of jobs, and the relocation of family members. Teachers reported that parents were focused on repairing homes and returning to normalcy in their lives resulting in less attention spent on their children's school activities. As a result, teachers assigned less homework as there may have been several families living in the same house or apartment with little space or facilities to work at home.

Hurricane Ike had a negative impact on students' emotional stability, interaction with adults, academic performance, and classroom behaviors. Participating teachers observed a decrease in students' ability focus on instructional activities and to work independently; consequently, teachers began to assign group work or allow students to work with partners. Students preferred to interact with their peers, resulting in teachers developing active and collaborative instructional activities. The decrease in students' interaction with classroom teachers corresponds with the decline in academic focus and the increase in disruptive behaviors such as fighting, distraction, and behavior referrals. Teachers noted that students needed time with their peers to talk about the emotional stress of the hurricane. Teachers provided time for students to talk with their peers about their common struggles and stress and the impact the hurricane had on themselves and their families.

Classroom facilities and instructional resources were seriously damaged or totally destroyed in some areas. Some teachers were required to share classrooms or teach without resources or instructional materials. Donations from neighboring communities assisted some classroom teachers to have instructional materials. Teachers observed that after the hurricane, students appeared to be academically behind previous years' classes. Many teachers were concerned about the state accountability assessments (TAKS) and the negative impact of numerous lost days and lost instructional time on their students' ability to perform well.

Training for classroom teachers and their students appeared to be a concern for some respondents. Some teachers reported that safety drills were important; however, the drills had a negative impact on younger students. Other teachers recommended training children on safety preparedness including what to do in a disaster or evacuation and when to do it.

Federal and state governmental agencies were the source of frustration for many participants. Many were frustrated over the need to make up lost instructional days and the slowness of the Texas Education Agency to understand the impact of lost instructional time because of the hurricane on preparation for the state accountability requirements. Other teachers were frustrated over the inability of governmental agencies to respond quickly and efficiently to basic needs of housing and financial support for children and families. Teachers observed their students' families were homeless and in need of basic supplies such as food, water, and shelter. One teacher personally experienced having to work with three different counselors to get a FEMA trailer for housing.

Hurricane Ike had a serious and devastating impact on personal and school property in the Southeast Texas region. Many homes and school buildings were destroyed by strong winds and a 25-foot sea surge that caused over 1.3 million people to be evacuated ("In Ike's Wake", 2008; "Rita Captured", 2005). Classrooms and instructional materials were destroyed leaving teachers to improvise teaching activities. Teachers experienced their own challenges with the impact of Hurricane Ike while being the ones to respond first with emotional and academic support to students' needs and behaviors in the schools.

Recommendations

The following are recommendations based on the survey responses from classroom teachers who experienced the impact of Hurricane Ike on their students. These recommendations are made so that classroom teachers may be better prepared to determine priorities and make appropriate actions in an emergency such as a natural disaster.

1. Train teachers to observe and recognize students' behaviors of stress and anxiety and understand emotional stressors for students.
2. Train teachers on ways to help children express their feelings openly and acknowledge their emotions of fear, loss, anger, and insecurity.
3. Train teachers in methods to create and maintain structure and routines in class activities that support consistent, appropriate, and positive student behavior.
4. Train teachers to demonstrate examples of positive behaviors such as remaining calm and purposeful in emergencies.
5. Train teachers to maintain discipline while allowing for tolerance and flexibility in class activities and instructional requirements.

6. Train teachers on a variety of teaching and learning strategies to meet the individual needs of students experiencing trauma and emotional insecurities that affect students' learning abilities.
7. Train teachers on finding and using community resources such as counseling, family assistance, shelters, and other basic support systems to better support the needs of their students and families.

References

- Bender, W. N., & Sims, R. (2007, October). Katrina kids! Helping kids exposed to population-wide trauma. *Teaching Exceptional Children*, 40(1), 40-47.
- Collins, A. (2003). *Tragedies of American history*. New York: Penguin Books.
- Crundwell, R. M., & Killu, K. (2007, October). Understanding and accommodating students with depression in the classroom. *Teaching Exceptional Children*, 40(1), 48-54.
- Davis, M. R. (2006) Students displaced by storms score lower on state tests. *Education Week*, 26(4), 2-3.
- In Ike's wake: Southeast Texas endures hurricane's devastation*. (2008). The Beaumont Enterprise, Piedmont Publishing.
- Lerner, M., Lindell, B., & Volpe, J. (2006). *Experience with out preparedness for emergencies and disaster among public schools in California*. NASSP Bulletin, 91, 201-218.
- Murray, M. (2009, spring). A different type of storm surge: Show of support buoys spirits at Galveston schools ravaged by Hurricane Ike. *Association of Texas Professional Educators (ATPE) News*, 29(3), 23-24.
- One year since Hurricane Rita*. (2006). The Beaumont Enterprise, Piedmont Publishing.
- Rita captured*. (2005). The Beaumont Enterprise, Piedmont Publishing.
- Schonfeld, D., Lichenstein, R., Pruitt, M., & Speese-Linehan, D. (2002). *How to prepare for and respond to a crisis*. Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix 1

Table 1

Teachers' Perceptions of Student Behavior Issues: Basic Needs N = 73

Student Behavior: Basic Needs			
Behavior	Increase	Decrease	% Participants
Homelessness	√		97
Daily attendance		√	92
Emotional stability		√	94
Parental involvement		√	99

Table 2

Teachers' Perceptions of Student Behavior Issues: Academic Focus/Classroom Behavior N = 73

Student Behavior: Academic Focus/Classroom Behavior			
Behavior	Increase	Decrease	% Participants
Academic focus		√	89
Working independently		√	97
Behavior referrals/disciplinary infractions in the classroom	√		83
Fighting in school	√		84
Referrals for disruptive behavior	√		84
Interest in extra curricular activities		√	81

Table 3***Teachers' Perceptions of Student Behavior Issues: Student Social Interaction N = 73***

Student Behavior: Student Social Interaction			
Behavior	Increase	Decrease	% Participants
Interaction with school administrators	√		87
Responsiveness to teachers		√	86
Interaction with school counselors	√		94
Social interaction with peers	√		97
Responsiveness to peers	√		89

Table 4***Teachers' Perceptions of Safety and Facilities Management N = 73***

Safety and Facilities Management			
Behavior	Increase	Decrease	% Participants
Class facilities and resources		√	95
Faculty/staff training	√		90
Safety regulation compliance	√		94