

## *Exploring the Experiences of Special Educators Following the Joplin Tornado*

**Allyson Palmer, M.Ed. (Ph.D. Candidate)**  
**University of Kansas**

### *Abstract*

On May 22, 2011, an EF5 tornado ripped through Joplin, MO, leaving many residents without homes and destroying or damaging several school buildings. The purpose of this qualitative study was to explore how special education teachers responded to the needs of their students with disabilities following the Joplin tornado. Purposeful sampling was used to select three participants who were special education teachers working in schools that were damaged or destroyed by the tornado. The researcher used semi-structured interviews to collect data that was then coded to identify categorical themes. The results showed the types of challenges experienced by special educators and their students, following the tornado, and the supports that were provided to help mitigate those needs.

## *Exploring the Experiences of Special Educators Following the Joplin Tornado*

On May 22, 2011, the city of Joplin, Missouri experienced the destructive effects of a natural disaster when an EF5 tornado ripped through the town. The tornado is considered one of the costliest and deadliest tornados in U.S. history (National Weather Service Weather Forecast Office, 2011). The tornado injured thousands, killed 162 people, and “destroyed or damaged 10 Joplin School District buildings, displacing thousands of students” (Kennedy, 2011; Ryan, 2011). The purpose of this qualitative study was to explore how special educators responded to the needs of students with disabilities following this devastating natural disaster. By investigating the experiences of special educators in Joplin following the tornado, the hope was to gain a better understanding of the challenges teachers face when their students are experiencing loss and trauma. A primary goal was to learn more about the kinds of supports special educators provided students with disabilities who were coping with the stresses caused by a traumatic event. As a result, the study sought to discover some basic principles of how to best support teachers and students affected by traumatic events.

The following primary research questions were explored:

- What were the experiences of special educators working in schools affected by the Joplin tornado?
- According to special education teachers, what were the challenges that students with disabilities faced after the Joplin tornado?
- What kinds of supports did special educators provide students with disabilities after the Joplin tornado?

### *Conceptual Framework*

The conceptual framework (see Figure 1) identifies the assumptions and beliefs about the topic being study. It represents key variables that were identified through experiential knowledge and existing theory and research.

Maxwell (2005) establishes the importance of identifying the role of the researcher’s experiences on the proposed study. The researcher is a former member of the Joplin community and an alumnus of Joplin High School. Based on the researcher’s personal reaction following the tornado and informal conversations with many community members affected by the tornado, the researcher proceeded with the assumption that many teachers, students, and family members of students will have experienced emotional, physical, or psychological needs associated with the disaster. As a former special educator, the researcher expected some students with disabilities to have unique needs associated with their disability, such as difficulty transitioning to new settings and experiences. Because of these unique needs, she hypothesizes special education teachers play an instrumental role in meeting the needs of students with disabilities and their families following traumatic events, even while potentially dealing with their own personal loss and recovery efforts.

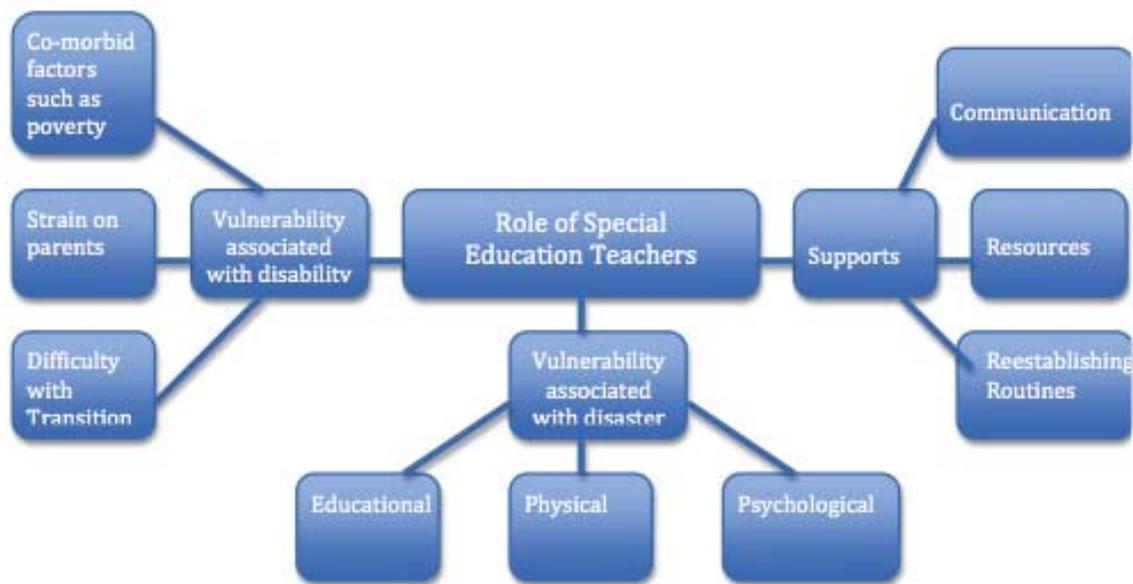


Figure 1. Conceptual Framework

Students with disabilities have unique needs separate from their peers without disabilities. People who experience the destructive effects of natural disasters also have unique needs. But, what happens when disability and disaster are experienced simultaneously? What are the unique needs of students with disabilities in the context of disaster, and what role do special education teachers play in supporting these students? Durant (2011) used an integrated vulnerability theory and social capital theory to explore the impact of Hurricane Katrina on the elderly population in New Orleans. Similarly, the current study used a theoretical framework that combines vulnerability theory and social capital theory to explore the effects of the Joplin tornado on students with disabilities. Furthermore, the study sought to identify whether special educators,

as a form of social capital in a community, play a role in mitigating the effects of disability and disaster for their students.

Vulnerability theory takes into account physical, environmental, and social vulnerabilities when considering the effects of disaster on outcomes. Durant (2011) argues, “an important point that disaster researchers should be aware of is that when a natural disaster occurs, the social conditions that determine vulnerability and its effects are already in place that will determine the possible outcomes or impacts” (p. 1290). Students with disabilities are a particularly vulnerable population, because of the vulnerability associated with both disability and age. Therefore, it is important to examine the types of social capital that are available to students with disabilities before and after disaster strikes.

Social capital theory considers how relationships and networks meet the needs of community members and individuals following a disaster (Durant, 2011). According to Durant (2011), “A major theoretical proposition of social capital in explaining responses to a disaster is that social networks (relationships, mutual ties, etc.) may provide varying levels and types of support to persons during a disaster” (p. 1293). Special education teachers are a form of social capital for students with disabilities; therefore, this study seeks to examine the types of support special educators provide to meet the needs of their students after a natural disaster.

Using an integrated theoretical framework, of vulnerability theory and social capital theory, the researcher examined the literature on the following examples of vulnerability (vulnerability and needs associated with disability and disaster) and social capital (supports provided by special educators).

#### *Vulnerability associated with disaster*

Natural disasters, such as tornados, clearly influence all of the people that experience the major devastation that is left behind in the path of destruction. Children are especially vulnerable to the catastrophic effects of disaster (Hutton, 2010). The psychological, physical, and educational challenges that emerge for children following a natural disaster are well-established (Hutton, 2010; Peek & Richardson, 2010). Natural disasters can cause stress (Kamo, Henderson, & Roberto, 2011; Peek, Morrissey, & Marlatt, 2011) and mental health challenges (Lowe, Chan, & Rhodes, 2011) for those that experience them. As a result of a disaster, children are susceptible to psychological problems such as, post-traumatic stress disorder, depression, anxiety, or behavioral problems and physical problems such as illness, disease or death (Peek & Richardson, 2010). After a natural disaster, children are also at a high risk of experiencing educational problems such as missed school, academic difficulties, and delayed development (Peek & Richardson, 2010).

#### *Vulnerability associated with disability*

Students with disabilities are particularly vulnerable in the context of a natural disaster, because they experience vulnerability as a result of both their age and disability. Children with disabilities often experience co-morbid factors that contribute to their vulnerability such as, “higher poverty rates, elevated risk exposure, greater vulnerability to traumatic loss or separation from caregivers, more strain on parents, and poor post disaster outcomes” (Peek & Stough, 2010, p. 1260). One particularly stressful event that often occurs after a natural disaster is relocation

(Kamo et al., 2011). Relocation can be especially difficult for students with disabilities that may have difficulty with transitions. For example, students with autism spectrum disorder often have difficulty transitioning between settings (Dettmer, Simpson, & Myles, 2000). In Joplin, where the tornado flattened or damaged 30 percent of the structures (Taylor, 2011), many people were left without homes and students in 6 school buildings were required to move to different schools, which may have resulted in difficulty related to transitions for many students with disabilities.

#### *Supports that special educators provide*

Although the effects of natural disaster can leave students with disabilities vulnerable to significant psychological, physical, and educational problems, social supports can help mediate those effects (Durant, 2011; Kamo et al., 2011). Teachers are one example of social supports. Ducey and Stough (2011) examined the role that special educators played in supporting students with significant disabilities after Hurricane Ike. They found that teachers, students, and families all experienced loss as a result of the hurricane. Losses included material objects, services, such as transportation or medical services, and academic, social, and behavioral skills. Teachers also reported losing material possessions and professional functioning. Ducey and Stough (2011) found that teachers offered valuable support for students and their families following the hurricane. Teachers offered support in the form of “resources, communication, and reestablishing routines” (Ducey & Stough, 2011, p. 13). According to Ducey and Stough (2011) the support that special education teachers provide to students with disabilities and their families can be especially important because emergency management systems provided limited individualized support for people with disabilities in disaster.

### ***Description of Methods***

#### *Research Participants*

Purposeful sampling was used to select participants. Maxwell (2005) identifies four reasons for using purposeful sampling: achieving representativeness of the setting, adequately capture the heterogeneity of the population, examine cases that are critical to the concept being studied, or to establish particular comparisons to identify differences. For the purposes of this study, purposeful sampling was used to examine cases that are critical to the theory being studied and to identify representatives of the setting being studied. Representative participants were special education teachers who are currently working in schools that were damaged or destroyed by the Joplin tornado. According to the assistant director of special services in Joplin, there are 51 special education teachers that were directly impacted by the tornado: 37 special education teachers lost their schools, and 14 were relocated to other buildings (M. Barlass, personal communication, November 21, 2011).

The current sample consisted of 3 special education teachers that worked in buildings impacted by the tornado. Research participants were identified through personal contacts within the district. As a former member of the Joplin community and alumnus of the Joplin district, the researcher knew personally, or through acquaintances, several teachers and administrators currently and formerly employed by the district. The personal association with members of the community and school district were used to help identify and recruit participants. Personal contacts provided the researcher with the names and contact information of potential participants, who were then contacted by e-mail and informed of the purpose of the study.

The special education teachers that agreed to participate worked in different settings and had different levels of teaching experience. Two teachers worked in self-contained classroom settings, and one teacher taught in a resource setting and co-taught in a general education setting. All of the participants had at least five years of teaching experience. The teachers taught different grade levels, with one teacher each being at the elementary, middle school, and high school level. Each teacher interviewed worked in a school that was either damaged or destroyed by the Joplin tornado. All of the teachers interviewed were working in the school district both during and after the tornado.

The following profiles describe the teachers that were interviewed and their personal experiences following the tornado (See Table 1).

| <b>Teacher</b> | <b>Number of Students on caseload</b> | <b>Student Grade Levels</b>          | <b>Students' Disabilities</b>       | <b>Postdisaster Status</b>   | <b>Teachers' Personal Experience</b>   |
|----------------|---------------------------------------|--------------------------------------|-------------------------------------|--|--|
| Angela         | 13                                    | K-5th                                | Predominantly Autism                | Taught summer school less than one month after the tornado in a different school building. Returned in the fall to the school building she had previously taught at, which had undergone significant renovations after being damaged by the tornado.   | Angela was out of town when the tornado hit. The house she had recently moved away from was severely damaged by the tornado.   |
| Denise         | Not reported                          | 9 <sup>th</sup> and 10 <sup>th</sup> | Predominantly Learning Disabilities | The high school Denise taught at was destroyed. The high school was split between two new locations, with 9 <sup>th</sup> and 10 <sup>th</sup> graders going to an old high school building and 11 <sup>th</sup> and 12 <sup>th</sup> graders going to a makeshift school out of the local mall. Denise's classroom was relocated to the old high school building. | Denise reported suffering significant personal loss when her home was hit by the tornado, while she was in it. She expressed concern about the emotional and physical toll it has taken on her ever since. |
| Steve          | 13                                    | 6 <sup>th</sup> -8 <sup>th</sup>     | Predominantly Emotional Disturbance | The middle school Steve taught at was destroyed. Steve is teaching in a converted warehouse on the outskirts of town.  | Steve saw went outside to check on the weather and saw the tornado headed toward him. He ran to a  |

|  |  |  |  |  |   |
|--|--|--|--|--|---|
|  |  |  |  |  | crawl space in his home for safety. Steve's home was spared with minor damage, but some of the homes in his neighborhood suffered significant damage. |
|--|--|--|--|--|---|

*Table 1. Participant Profile (Adapted from Ducy & Stough, 2011)*

**Angela.** Angela teaches in an elementary school that was significantly damaged by the Joplin tornado, but is still functioning as a school. She teaches in a self-contained classroom that serves predominantly students with autism in Kindergarten through fifth grade. She has taught for five years in the Joplin school district, but has prior experience teaching preschool in another school district. Although Angela was not in Joplin when the tornado hit, she had family members who lost their home. Angela was traveling back to Joplin when she and her family began receiving text messages about the tornado. She reported feeling anxiety as she returned home and passed house after house that that had been hit, either partially or totally. Luckily, the house she currently lives in was spared. However, she had also just recently moved from a home that was completely demolished by the tornado, and she expressed a feeling of dread that if the tornado had struck one month earlier she and her children would have been in that home.

**Denise.** Denise teaches high school students with learning disabilities. She primarily co-teaches in the general education setting. She also works in a program called FLEX, which educates high-risk students, such as those in drug and alcohol recovery programs. Denise has twenty-eight years of teaching experiencing. She is in her twenty-first year in the Joplin school district. The high school Denise taught at was completely destroyed by the tornado; therefore, she is now teaching in an old school building, which now houses the ninth and tenth grade students. Denise experienced significant personal loss as a result of the Joplin tornado. She was at home, seeking refuge in a storm shelter, when the tornado struck. It destroyed her entire home, including the basement, and Denise was trapped in the storm shelter until neighbors were able to remove debris from the basement that had fallen on the storm shelter door. She reports that she has “been on recovery since.”

**Steve.** Steve teaches students from sixth to eighth grade in a self-contained classroom setting. Most of the students he teaches are diagnosed with emotional disturbance. This is his seventh year of teaching and his third year teaching in Joplin. The middle school Steve taught at was hit by the tornado and is now unusable. He is currently teaching out of a warehouse that was converted into a space that is being used as a temporary middle school. When the tornado hit, Steve was at home, taking shelter in a crawl space. Although other houses in his neighborhood were significantly damaged by the tornado, Steve's house only suffered minor damage. However, experiencing the lasting fear of huddling in a crawl space while hearing what sounds like your house being sucked away has left him with an understanding of the affect that a tornado can have on those who encounter it.

### *Data Collection*

Data were collected through semi-structured interviews. The interview protocol (See Figure 2) was used to guide the semi-structured interview. The interview questions were developed based on information gathered through existing literature and experiential knowledge. The questions sought to gather information about the teachers' experiences following the tornado and to learn more about how the teachers responded to their students' unique needs. The face-to-face interviews occurred approximately six months after the Joplin tornado. Two interviews were conducted in the participants' homes and one interview was conducted at the participant's school. The interviews lasted approximately one hour and fifteen minutes each. The interviews were audio recorded and transcribed. The transcripts were used to code the data, so that the data could be organized into overarching themes.

### **Semi-structured Interview Protocol**

| <b>Section</b>                                       | <b>Questions</b>  |
|--|---|
| <b>Experiences</b>                                   | <ol style="list-style-type: none"><li>1. Tell me about your own personal experiences following the tornado. What influence, if any, did that have on your role as a special educator?</li><li>2. Tell me about your experiences returning back to school after the tornado. How did this school year compare to your "back to school" experiences prior to the tornado?</li></ol>   |
| <b>Impact of Tornado on Students/<br/>Challenges</b> | <ol style="list-style-type: none"><li>3. Tell me about your classroom and the students on your caseload. Number of students? Types of disabilities? What impact, if any, did the tornado have on your students?</li><li>4. Describe a student who was affected personally by the tornado. Tell me about the challenges that student experienced. How does that student's experience compare to the experiences of the other students in your class, was it typical or exceptional?</li><li>5. How would you compare the impact of the tornado on students with disabilities to students without disabilities?</li><li>6. When you think about your students and their particular needs, describe any challenges (emotional, physical, educational) your students experienced as a result of the tornado.</li></ol>  |
| <b>Transition</b>                                    | <ol style="list-style-type: none"><li>7. Often students with disabilities experience difficulty associated with changes in routines, schedules, and structure. Research also indicates the transition to different school environments is especially challenging for students with disabilities. What transition supports do your students need, if any, and was that level of need influenced by the tornado?</li><li>8. How would you describe the changes that your students experienced as a result of the tornado?</li><li>9. In what ways, if any, did the tornado pose any particular challenges for your students in regards to transitioning between new experiences and environments? (For example, new school, new home, new teacher, new students)</li><li>10. Describe the role you play as a special educator in helping students</li></ol> |

|                            |  |
|----------------------------|--|
|                            | with disabilities adjust to changes. Describe the impact of the tornado on your role as a special educator in regards to helping students transition under changing conditions.  |
| <b>Supports</b>            | <ol style="list-style-type: none"> <li>11. As a special educator, how did you help your students respond to stress or challenges experienced as a result of the tornado?</li> <li>12. Have you experienced any challenges educating students as a result of the tornado? If so, what supports did you receive or would you have liked to receive to address those challenges?</li> </ol> |
| <b>Future Implications</b> | <ol style="list-style-type: none"> <li>13. Based on your experiences, what suggestions would you give other special educators on how to best support students with disabilities following a natural disaster?</li> <li>14. Are there any other things you would like to add before we end the interview?</li> </ol>  |

Figure 2. Semi-structured Interview Protocol

### *Data Analysis*

To analyze the data, the researcher began by reading through all of the data sources and recording general thoughts and initial impressions. She then coded the data collected through the semi-structured interviews. First, the researcher coded the initial interview to identify broad themes that emerged. Next, she employed the constant comparative method and continually compared the first interview codes with subsequent interviews that were coded until categorical themes emerged across interviews (Merriam, 2002).

Cresswell (2009) suggests implementing reliability procedures to ensure data is accurate. For this study, the researcher used the following reliability procedures: check transcripts and compare the meaning of codes. Transcripts were compared to audio recordings to ensure no mistakes were made during transcription. Data were also frequently compared with the codes to ensure a drift in the code definition did not occur.

The following validity strategies ruled out threats to interpretations of the data: explain researcher biases, collect “rich data”, and compare results to existing literature (Creswell, 2009; Maxwell, 2005). To contribute to the validity of the results, the researcher was forthright about personal biases and how her experiences shaped the interpretation of the data. Another, validity strategy the researcher employed was collecting “rich data”. By conducting, recording, and transcribing intensive semi-structured interviews that were approximately one hour and 15 minutes in duration, she was able to collect detailed and extensive data to support the conclusions. Finally, the current findings were compared to those of Ducey and Stough (2011), who explored special education teacher support following Hurricane Ike. Comparing literature on similar settings and individuals can help identify the significance of the findings (Maxwell, 2005).

### *Discussion of Results*

The information that was gathered from this study was clustered under two broad themes: challenges and supports. Under each of these broad themes, more specific organizational categories emerged. Challenges included 1) challenges experienced by students and 2)

challenges experienced by teachers. Supports included 1) supports provided by volunteers to students and families 2) Supports provided by teachers to students and families, and 3) technological supports. Substantive categories were then determined from examples within each organizational category that emerged across interviews. Table 2 outlines the broad themes, organizational categories, and substantive categories that surfaced from the interviews.

| <b>Broad Themes</b> | <b>Organizational Categories</b>                                     | <b>Substantive Categories</b>   |
|---------------------|--|---|
| Challenges          | Challenges Experienced by Students                                   | <ul style="list-style-type: none"> <li>• Personal Loss of Belongings</li> <li>• Transition (Change in routine and Physical Location)</li> <li>• Emotional Trauma</li> <li>• Influence of Disability</li> </ul>  |
|                     | Challenges Experienced by Teachers                                   | <ul style="list-style-type: none"> <li>• Personal Loss of Belongings</li> <li>• Loss of Classroom Resources</li> <li>• Transition (Change in Routine and Physical Location)</li> <li>• Emotional Trauma</li> <li>• Limited Time to Prepare for School</li> <li>• Guilt</li> </ul> |
| Supports            | Support Provided by Volunteers to Teachers and Students and Families | <ul style="list-style-type: none"> <li>• Time/Labor</li> <li>• Resources</li> <li>• Emotional</li> </ul>  |
|                     | Support Provided By Teachers to Students and Families                | <ul style="list-style-type: none"> <li>• Time/Labor</li> <li>• Transition Support</li> <li>• Emotional Support</li> <li>• Resources</li> </ul>  |
|                     | Technology   | <ul style="list-style-type: none"> <li>• For Communication among Families, Students, and Teachers</li> <li>• As a Resource for Students with Disabilities</li> <li>• As a Resource for Teachers</li> </ul>  |

Table 2. Coding of Data from Semi-Structured Interviews.

## *Challenges*

### **Challenges experienced by students**

The teachers that were interviewed all talked about how the tornado affected their students. All of the participants agreed that the tornado certainly had an effect on some level on all of the students and all of the teachers in Joplin. As Angela said, "...we were all going through it, and when people say were you affected? We all were affected. And, I get that question. I understand it, but we *all* were."

***Personal loss of belongings.*** The participants talked about how several of their students lost their homes and all of their personal belongings. Angela reported that several of her students lost their homes, and one of her students continues to talk about it every day. Another student was celebrating a family member's graduation from high school with a party at their home, when the tornado ripped through the home. At the time, the whole graduation party was huddled in the bathroom. At the last minute Angela's student wanted her teddy bear, so her family had to force her into the bathroom, unwillingly, without it. When the family finally emerged from the bathroom, they discovered it was the only room in the house that was left. Amazingly, when they came out, Angela reports, "the teddy bear was right there. Everything else was pretty much gone."

***Emotional Trauma.*** Along with losing personal belongings, many students in Joplin experienced a certain level of emotional trauma. To convey the magnitude of the emotional trauma her students are dealing with, Denise described her students' experiences as "war stories". The mother of one of Angela's students even decided to move out of the area because her son with autism was so deeply affected by the experience. The mother told Angela that even driving around the town and seeing the damage left behind by the tornado was too difficult for her son and, therefore, he refused to open his eyes. Angela and Steve both talked about how the tornado left students with a sense of fear about impending storms. Angela gave an example of how noise from construction workers traumatized her students with memories of the storm that had changed their lives.

*One day in particular, someone dropped something on the roof. They were carrying something heavy...and dropped it. I had two students at the table with me and they both got under the table and covered their heads.....They get scared when it rains. They get scared when the wind blows real hard.*

***Transition.*** Students also had to deal with challenges related to change. Students with disabilities are often particularly vulnerable to difficulties related to transition and change; for example, students with autism spectrum disorder may have difficulty transitioning between settings (Dettmer et al., 2000). The interviewed teachers talked about some of the difficulties related to transitioning between different schools as a result of the tornado. Angela said in regards to her students with autism, "...transition and change is one of the most horrendous things in their life. They don't like change. They don't like transition." This was especially difficult during summer school, when all of Angela's students were attending a different school for the first time in their lives. According to Angela, many of them didn't even "understand that

there are other schools.” Steve’s students also had to adjust to change. They were getting bussed from all over the district to a makeshift school in a warehouse, when the fall school year began. He described how challenging it was for students to get bussed such long distances. Also, Denise and Steve both talked about how difficult it would be for their students to go to a different high school than what they had always known and expected. Without a doubt, the tornado altered their students’ sense of normality.

### **Challenges experienced by teachers**

As their students are struggling with personal loss, emotional trauma, and difficulty transitioning to new situations and environments, their teachers are there to support them and to help them adjust to the changes and feelings they are experiencing. In the mean time, teachers are often dealing with their own challenges as a result of the tornado. The interviewed teachers shared some of the struggles they dealt with while trying to balance their responsibilities as a teacher with their own loss and trauma. Denise summed it up, when she asked, *“How do I teach these children and do life too. I struggle with it every day. How do I do this?”*

***Personal loss of belongings and classroom resources.*** Denise described the experience of being down in a storm shelter while the tornado raged above her. She said she knew it was bad, because she could hear the sounds, but she had no idea “it destroyed everything and even took [her] basement. It literally just gutted and destroyed everything.” Denise talked about how difficult it was to return back to school and work, when she was dealing with the exhaustion of trying to rebuild her life that was turned upside down after she lost all of her worldly possessions. On the other hand, she also felt like she needed the normality that returning to school represented for her. Angela did not lose her home, but some of her instructional assistants lost their homes and nearly lost their lives. Angela told stories of how emotional it was for them to return to work after experiencing such devastating loss. Although Angela and Steve did not lose their homes, they both mentioned the challenge of losing classroom resources as a result of the tornado.

***Emotional Trauma.*** Denise is clearly still suffering from the emotional trauma of surviving the tornado as it ripped through her home. She got visibly emotional several times during the interview as she attempted to recall her experience. Denise even shared that she regularly visits a trauma counselor to help control her own emotions and to subdue the nightmares that she has about the tornado. She says, *“I am a fifty year old mother and wife and teacher that has gone through it, and I’m not powerful enough to say, well, I just need to pull up my bootstraps and take it. I am, but I can’t do it alone. So, I go to the trauma counselor once a week.”* On the positive side, she reports that she feels better able to relate to her students because, having gone through it, she understands the weight and power of their emotions. She also recognizes the importance of helping her students confront their own feelings.

***Transition.*** Students are not the only ones struggling to adjust to change. All of the teachers interviewed also talked about the challenges associated with the changes caused by the tornado. Steve discussed the difficulty of moving to a new building with limited space. He described it as *“....really tight. I mean, space wise. We’re on top of each other. The kids don’t have anywhere to go. It’s a square.”* Angela talked about adjusting to working in a building without air

conditioning, while crews worked to repair the air conditioning in her school. Denise, on the other hand, had difficulty adjusting to the new technological expectations that were being placed on her. She described how the tornado expedited the district's efforts to change to a twenty first century school. In other words, instead of replacing all of the damaged textbooks, the district chose to equip all of the high school students with their own laptops, and to utilize a project based system where students use computers to discover content rather than read it from a textbook. This led to unexpected challenges for a teacher who was used to teaching in a more conventional format.

*Teaching a new dog, I mean an old dog new tricks, in the midst of everything else is like, 'are you kidding me?!' I went to training for five days prior to school beginning. I don't remember a thing. I remember nothing from that training.*

**Limited Time to Prepare.** All of the teachers interviewed talked about how the tornado left them feeling as though there was not enough time to prepare for the impending school year. Denise said about returning to school, "*I wasn't ready to go back.....but the hand was forced to it, and I understand why.....I don't know that I needed more time, but I just was exhausted, because we had not stopped.*" Similarly, Steve talked about the challenge of returning to school when summer vacation was filled with making repairs and recovering from the storm. He said, "*It's just been a hard year all around, and I think [because of] the tornado.....I don't think you have a summer break.*" Angela taught summer school during the summer following the tornado, and she talked about how difficult it was to prepare for summer school while dealing with the remains left behind by the tornado. She said that she only had a four hour time period to get to the school and get together any materials that she would need to hold summer school in a different building. Although she found the experience challenging, she also felt like it was important for her to be there for her students during summer school.

**Guilt.** Another common theme that emerged across the interviews was a recurring feeling of guilt that the teachers expressed. Both Denise and Angela reported feelings of guilt as a challenge they experienced. Angela talked about how difficult it was for her to accept help and donations from volunteers. She said, "*It was very hard for me. It humbled me.*" Denise talked about trying to cope with the guilt that she felt when she learned of the extent of the destruction caused by the tornado. Limited communication methods left her unaware of the magnitude of the devastation, but she still felt guilty that she was unable to help others more. Denise said,

*Because we were one of the first hit, so as soon as we got out, it was still going through the town. We did not have any idea that was happening. You know, and we have somewhat of that remorse that, why didn't we go? Why didn't we go help? We didn't know. And, I've had to forgive ourselves for that, but we didn't know. We are on the edge of town. And nobody knew.*

### **Supports**

**Support provided by volunteers to teachers, students, and families.** Another theme that was consistent across all of the interviews was how much the support provided by volunteers meant to teachers, students, and their families. All of the participants that were interviewed talked

about the support provided by volunteers, including donations of time and labor, donations of monetary resources and supplies, and donations of emotional support. From this tragedy, clearly there emerged a sense of community, resiliency, and a helpful spirit among strangers and friends. As Steve said,

*Overall, I think in Joplin, I think you saw the very best of human kind, and you know people that are resilient and want to get back to where they were at and aren't going to let anything get in their way of doing that. And, not just people in Joplin, but around this nation and around the world. Everybody, I think, pitched in.....The magnitude of it just swept the nation. [There has] just been a lot of outpouring of support and help.*

**Time/Labor.** Denise gave numerous examples of how volunteers from all over the world helped her after she lost her home. Friends volunteered their home and car to her, strangers volunteered their labor, and organizations donated much needed supplies such as blankets and pillows. She said at times she would walk around and see up to fifty people on her property helping go through debris. One couple even traveled from Colorado to help work on her property and they donated a laptop computer to Denise, even though they were complete strangers. Angela reported how volunteers from across the country helped her in her classroom. They helped her move materials from her damaged classroom to the new summer school location. They also helped her prepare her recently renovated classroom for the new school year.

**Resources.** Not only did volunteers donate their time and labor, they also donated much needed supplies and monetary resources. Steve, Denise, and Angela all talked about the overwhelming gratitude they felt for the much-needed supplies that were donated to their classrooms. For example, Angela and Steve talked about the Adopt-a-Classroom Program, which raised funds to restock the classrooms of damaged schools. They shared how valuable that program was to their recovery efforts. Angela was able to get technology and furniture for her classroom as a result of the program. The summer school classroom of a different school in Missouri adopted Steve's classroom. The class completed a service project to raise money for the adopt-a-classroom program and donated \$1,200 to Steve's class. Steve was able to replace supplies, furniture, and educational games with the donated money.

**Emotional Support.** After the tornado, volunteers were also on hand to provide emotional support to teachers, students, and their families. Steve and Denise both commented on the beneficial services provided by the Ozark Center, which provides behavioral health services to children, adults, and families. After the tornado, staff from the Ozark Center volunteered to help students cope with the emotional trauma they were experiencing. Therapists from the Ozark Center continue to be available for both students and teachers. Denise talked about the "amazing" job the Ozark Center has done for their school and even for her as she struggles to deal with her own emotions. Steve talked about how the emotional support provided by the Ozark Center has not only been helpful for victims of the tornado, but also how the on-site therapists from the Ozark Center have been a valuable asset for one of his students who is dealing with the loss of his mother. Furthermore, Denise talked about how the Ozark Center is helping teachers identify signs of substance abuse, which is a fear for students who do not know how to cope with the difficult emotions they are experiencing. Denise said,

*The trauma counselors come from Ozark Center. And Ozark Center is trying to be there to listen to the needs of the students and of the staff, and then try to fill those needs. It's a big job. A great big job. And, then we also have real concerns for substance abuse, an increase in substance abuse due to [the tornado]. And so there's a process with Ozark Center and Missouri Southern's Yes Program, which is the mental health program they have there, to work with some of us that work with the higher at risk kids to early detections of substance abuse or signs of it--- getting them into counseling quickly and consistently and overseeing these kids and their parents for support.....There's an amazing community that wants the best for this community. They know that we were already in that kind of sad hole of substance abuse. There's quite a bit of it in this area. Not that it isn't everywhere, but now we've got a real risk because people are sad, and they don't know what to do with the sadness.*

**Support provided by teachers to students and families.** Another theme that emerged across interviews was how teachers supported students and their families. Each of the special education teachers talked about how they had helped their students cope with the stress and challenges of returning to school following the tornado.

**Transition Support.** The participants talked about how they addressed the transitional challenges that their students experienced. For example, Steve talked about how his school helped make the transition to a new school building go more smoothly by hosting a back to school night for students and their families. Denise talked about how it was difficult for her students to have to start high school in an old run down building instead of the high school they were anticipating going to before the tornado. To help make that transition easier for her students, she had the students paint and decorate the classroom to make it feel more like their space. Angela reported that her students with autism had a particularly difficult time adjusting to the change caused by the tornado. In order to help support her students, Angela used picture schedules and kept them in a routine. She wanted to help predict the change for her students, and by doing so she reported that the transition back to school after the tornado was a lot smoother for her students than she expected.

**Emotional Support.** All of the participants played an integral role in helping their students who were dealing with emotional trauma as a result of the tornado. Steve talked about how he helps support his students emotionally by building a positive relationship with them. Angela and Steve both talked about how they reassure their students that everything is fine when they are scared, specifically when they are frightened of impending storms. For example, Steve reported getting out the iPad and talking to his students about weather forecasts and tornado warnings to help reassure them when the weather looked bad and they seemed scared. Denise did class projects with her high school students to help them cope with their feelings of loss and sadness. For example, she and her co-teacher had their students write about their experiences the day of the tornado. Denise talked about how powerful this activity was for both the teachers and students to write and share their stories. She said about the assignment,

*At that time, it changed the total environment. That I've never seen before. Ya know, we were no longer a classroom, but we were family. We've all been*

*through it. And, there was a lot of crying and a lot of holding and a lot of 'it will be alright...we're gonna be ok'.*

**Technology.** Another theme that emerged across all of the interviews was how integral technology has been as a resource for both teachers and students. Denise and Angela talked about how technology was a valuable tool for finding out information about the safety of their students and families following the tornado. All of the participants talked about how technology, such as iPads, iPod touches, or laptops, has been donated to the schools or classrooms. The participants commented about what a difference the technology has made for the teachers and their students with disabilities.

**Communication.** The interviews revealed the power of technology for connecting students, families, and teachers after tragedy strikes. Angela told the story of how the family of one of her students was trapped under debris, and the mother was able to use a cell phone to text message for help. Angela reported the horror when the first text message that she got from her student's family was "*Call 911. I'm trapped.*" When Angela responded to the text, she was relieved to find the family was being dug out of the debris. Similarly, Denise reported how social media was a valuable tool for her to learn about the safety of her students immediately following the tornado. She said Facebook was "the only means of communication", because phone service was interrupted for weeks after the tornado.

**Resource for students with disabilities and teachers.** The participants also revealed how beneficial donated technology has been for their students with disabilities. Steve is able to use technology like the iPad as a reinforcer for his students' positive behaviors. Angela is able to use the iPad to help her students with autism communicate through picture applications. Angela said, "*It's like magic. They see a picture, they understand. That's why we have picture schedules. That's why we have a lot of things labeled with pictures, but the iPad is an interactive picture.*" At the high school, all of the students were given laptops in place of traditional textbooks. Denise expressed how powerful that technology is for masking her students' learning disabilities. She talked about how the technology helps even the playing field for students with disabilities by providing them with access to tools that can help them without singling them out in front of their peers. She said, "*All of those compensatory skills that you try to get them to use when they didn't have the computers---They were embarrassed to pull out an extra gadget or an extra tool to get them. Now, it's all there for them and nobody knows, because every kid has their laptop out.*" For example, she shares how the technology can be used with students with learning disabilities:

*We find students with a reading disability, teaching them to highlight their information and have it read to them. And the computer does that for them. You stick your earplugs in, highlight, listen to it read to you. Oh yeah. It's awesome. Nobody knows whether or not they're listening to music or listening to someone read to them. It doesn't matter anymore. They are becoming an even...it's even.*

### ***Implications***

This study sought to examine the types of supports special education teachers provided to students with disabilities following the Joplin tornado. Applying the integrated

vulnerability and social capital theory explored by Durant (2011) with the elderly following Hurricane Katrina, the current study identified how special educators in Joplin, as a form of social capital in the community, supported students with disabilities who were left vulnerable by the tornado. It also demonstrates the types of supports provided by volunteers to teachers, students, and their families. The present study has several implications for preparing districts and communities to respond to the needs of special educators and their students following a natural disaster. It also provides important insight for special educators who may be helping students with disabilities respond to traumatic events.

Existing literature supports the findings of the current study. The qualitative study by Ducey and Stough (2011) following Hurricane Ike helps validate the findings that teachers, students, and families experience loss following natural disasters and that special education teachers play a necessary support role in helping students and families recover from the tragedy. The current study extends those findings by establishing specific challenges experienced by students related to emotional trauma and difficulty with transition. It also identifies specific challenges that teachers may experience following a natural disaster and how that influences their ability to respond to their students needs.

Furthermore, the current study provides district leaders and community members with examples of programs and resources that teachers and students found useful following the tornado. Communities that experience similar loss may benefit from learning how Joplin organized volunteers and donation programs that were essential for helping restock the school district's damaged and destroyed schools. Volunteers from throughout the community and the world clearly played a significant part in helping heal the emotional, physical, and financial struggles of the devastated area.

The study also provides a guide for special education teachers following catastrophic events. Each of the teachers interviewed provide examples of how educators can help support their students who are dealing with loss and trauma. The participants shared practical suggestions for others on how to help students deal with change and respond to their emotions.

Hopefully, the current study can be used to help guide the training of special educators on how to respond to the needs of students with disabilities following a natural disaster. It can also increase awareness of the specific challenges that students with disabilities and their teachers experience following a destructive tornado. Because special educators play a vital role in helping support students with disabilities who are coping with trauma, future research should continue to identify the types of challenges and supports that teachers and students face in the midst of natural disaster, so that we can learn how to best support special educators and their students.

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### *About the Author*

**Allyson Palmer** is a Ph.D. candidate in Special Education at the University of Kansas. Prior to pursuing a doctoral degree, she received her Master's of Education in Special Education from the University of Missouri-Columbia and worked as a Special Education teacher at the elementary level. As part of the RTI Leadership Preparation Program Fellowship, she is studying the application of Response to Intervention for both academics and behavior.