

The Impact of Hurricane Katrina on Technology and Media Infrastructures in Louisiana and Mississippi School Districts

Robert Hancock, Anne Nauman, & John Fulwiler

Perhaps one of the worst disasters in United States history, Hurricane Katrina is expected to have a lasting impact on the economies of Louisiana, Mississippi, Alabama, and Florida with losses in the billions of dollars (Zwaniacki, 2005). Given that the economic foundation of the approximately 600 schools and libraries affected was far from ideal before the hurricane, the prospect of recovery for technology and media infrastructures seemed dim.

The United States Department of Education appointed Henry Johnson, current Assistant Secretary for Elementary and Secondary Education, to examine the specific educational needs of Louisiana, Mississippi, and the Gulf region that were caused by the Katrina disaster as the department sought ways to redirect funding to meet the needs of disaster victims (United States Department of Education, 2005). Johnson was quick to allow waivers of requirements under 2416(a) of ESEA that required that 25% of Title IID monies be spent on professional development.

Although this was helpful, and the United States Department of Education was to come up with several other initiatives to assist schools in the affected regions, this study indicates very strongly that technology directors and media specialists throughout the region consider the Federal Communication Commission's (FCC) eRate Program to be the true hero so far in reconstructing technology infrastructures throughout the affected areas.

Robert Hancock, Anne Nauman, and John Fulwiler are professors in the College of Education at Southeastern Louisiana University, Hammond, Louisiana.

Background

Hurricane Katrina made landfall on August 29, 2005, devastating approximately 90,000 square miles of Louisiana, Mississippi, Alabama, and Florida (Morse, 2005). Katrina caused widespread devastation to parish (school district) infrastructures, forcing the displacement of tens of thousands of students (Kantrowitz & Breslau, 2005). In Texas alone, school officials said they were enrolling approximately 19,000 students displaced by the storm.

On September 7, 2005, the U.S. Secretary of Education, Margaret Spellings, directed in a letter to Chief State School Officers that portions of the initial \$10.5 billion in disaster relief be directed toward construction of temporary instructional facilities to offset losses in infrastructure (Spellings, 2005). She also indicated that school reconstruction would be a major part of all future assistance packages.

It was during these early stages that the FCC took quick and decisive action. On October 18, 2005 the FCC indicated a special funding window for \$96,000,000 in targeted eRate funds for Katrina-affected districts. This money was for the specific purpose of rebuilding telephone and computer networks and accommodating displaced students. To assist districts in applying, the FCC made several accommodations to the normal rules regarding awarding of funds, which will be discussed in detail later.

When considering that Orleans Parish was approved for more than \$3 million dollars in funding in December of 2005, while over a year later there are still huge swaths of the city left as they were the day after the hurricane, is a testimony to the efforts of the FCC and their subsidiary agencies.

Methods

The authors set about this research with little or no knowledge of the impact of Katrina on technology and media infrastructures. It was the authors' intention to provide a descriptive snapshot of the damage done and the relief received. To accomplish this goal, an online form was created, and the technology contacts for school districts listed in the Federal Emergency Management Agency's (FEMA) zones for individual assistance were contacted.

In these zones, FEMA, along with other federal, state, and local agencies, was providing aid to individual citizens and households in the form of grants, loans, tax relief, counseling, as well as emergency food and shelter. Unfortunately, due to the timing of the beginning of this study, classifications for Florida and Texas were not yet available, and for this reason, they were not included in the study.

The link for the survey was mailed out to the technology contacts for each of the parishes/districts, and each district was contacted by phone and urged to participate. A total of 77 parishes were targeted, and of these, 41 responded.

Findings

The findings were not surprising, with districts closer to the coast or having locations in flood-ravaged New Orleans reporting the most damage. Orleans Parish filed for over 3.4 million dollars in eRate monies almost immediately after the special Katrina window opened. Jefferson Parish showed an amazing amount of damage as well.

Comments across all districts and parishes relating to damage varied from "There was no damage to district facilities at all" to "We have lost everything; four complete libraries are destroyed." Figure 1 illustrates

the breakdown of damage by district/parish into rough categories with the low end of damage being not at all, and the high end of damage being catastrophic loss.

When Technology/Media Directors were asked how long it would take them to recover from hurricane-related losses without substantial aid there was also a mix of responses as is illustrated in Figure 2.

The majority of the losses indicated fell into the areas of hardware and networking infrastructure. This breakdown is illustrated in Figure 3.

The monetary value of technology infrastructure lost as estimated by technology directors in this sample is illustrated in Figure 4.

Despite the depressing nature of these data, the investigators were pleased to find the majority of technology directors both upbeat and optimistic. The majority indicated that they would be operating at post-Katrina levels within one to two years at most, and the main reason indicated for this state of events was the major response put forth by the FCC eRate program. In an environment where few have anything positive to say about government relief efforts, and where the acronym FEMA is definitely not used in polite company, the eRate program is considered with no small amount of respect and much kudos.

How eRate Saved School Districts

In September 2005, the FCC set aside \$96 million to help those schools and libraries affected by the devastation of Hurricane Katrina. They instituted a special filing window and relaxed many of the normal requirements that routinely guide and limit the eRate program. Most notable of these was the *internal connections* rule, which normally governs equipment put in schools and is usually set at a percentage based upon a school's poverty level.

However, to address the needs of Hurricane Katrina, schools within the damage zone were automatically set at the 90% level of qualification. As of January 2007, approximately 50 applicants from Mississippi and Louisiana and 60 service providers took advantage of the Order and have been notified about the status of their 2005 and 2006 Katrina related commitments totaling \$17,406,811.33 (United States Administrative Company, USAC, 2007). Of this amount (2007) received, \$15,160,759.33 went to Louisiana parishes and \$2,554,243.75 went to Mississippi districts.

Figure 1: Damage to School District/Parish Technology Infrastructure by Category

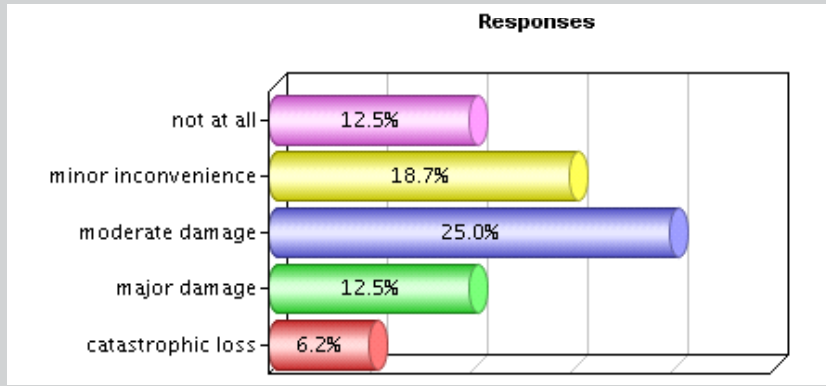


Figure 2: Years for Technology Media Infrastructure To Return to Pre-Katrina Levels without Outside Aid

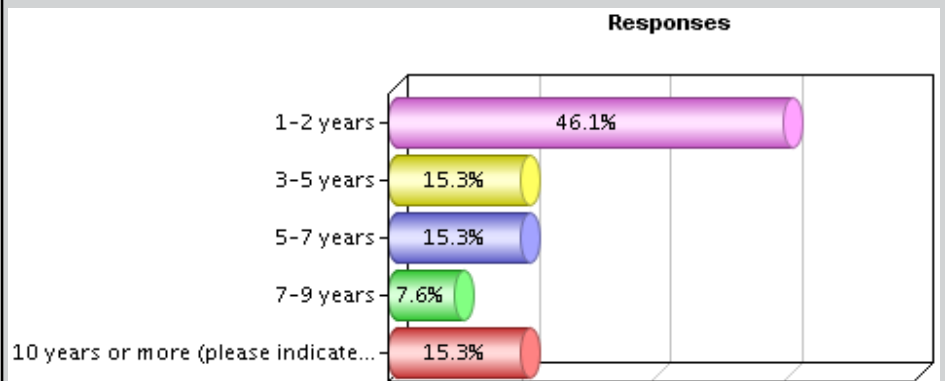


Figure 3: Percentage of Losses by Category Area

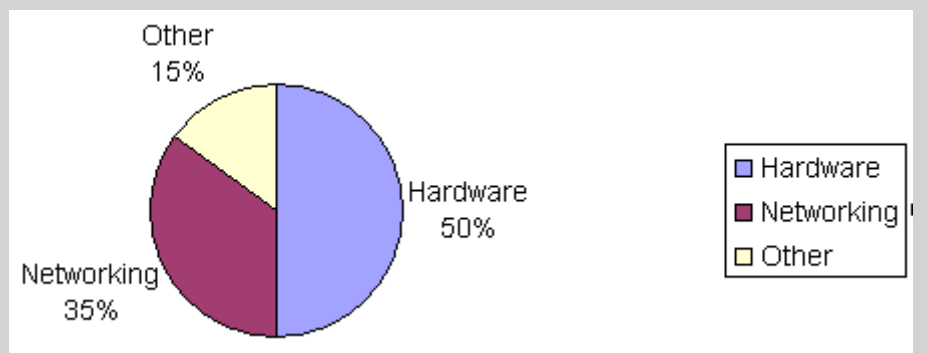
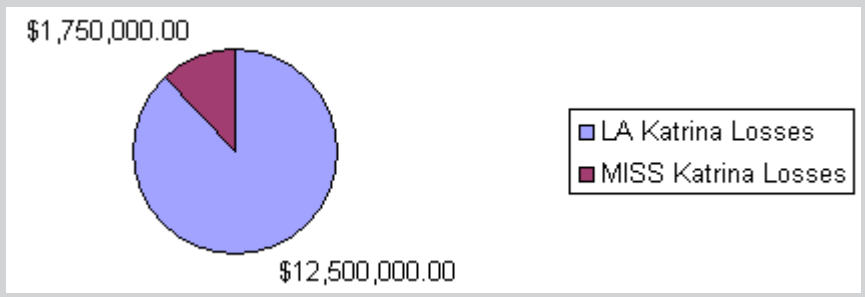


Figure 4: Estimated Monetary Value of Infrastructure Lost



Implications

It is interesting to note that given that we did not have a 100% response rate, our numbers still come respectably under the amount of money requested with ratios roughly equivalent to amounts requested from eRate. When this fact is taken with the comments from the vast majority of technology directors that their needs have been met, and that they were met primarily by the action of the FCC, it becomes clear that there was at least one response by the federal government to this tragedy that was timely and well managed.

If there are districts out there that are still in need, one is left wondering why they did not claim part of the approximately 78 million dollars in remaining aid. Regardless, it seems that the majority of parishes and districts have had access to the help they needed. For those children who have already had their lives disrupted, it is good news indeed.

References

Kantrowitz, B., & Breslau, K. (2005). *Some are found: All are lost*. Retrieved September 14, 2005, from <http://msnbc.msn.com/id/9287034/>

Louisiana Department of Education. (2005). *Education officials to submit federal requests, meet with U.S. Department of Education*. Retrieved September 20, 2005, from Louisiana Department of Education Website <http://www.doe.state.la.us/lde/comm/pr.asp?PR=654>

Morse, J. (2005). *Congress passes \$10.5 billion aid package for hurricane victims*. Retrieved September 14, 2005, from United States International Information Programs Website <http://usinfo.state.gov/gi/Archive/2005/Sep/02-473449.html>

Spellings, M. (2005, September 7). *Letter to Chief State School Officials*. Retrieved September 14, 2005, from United States Department of Education Website <http://www.ed.gov/policy/elsec/guid/secletter/050907.html>

United States Department of Education. (2005). *Supporting Americans affected by Hurricane Katrina*. Retrieved September 14, 2005, from

United States Department of Education. Website <http://www.ed.gov/news/hurricane/factsheet.html>

Universal Service Administrative Company. (2007). *Hurricane Katrina universal service fund relief information*. Retrieved September 14, 2005, from Federal Communications Commission Website <http://www.universalservice.org/katrina>

Zwaniacki, A. (2005). *Economists assess Hurricane Katrina's economic impact*. Retrieved September 14, 2005, from United States International Information Programs Website <http://usinfo.state.gov/ei/Archive/2005/Sep/02230601.html>

Date
April 2-5, 2008

What
The 9th Annual White Privilege Conference (WPC9)

Location
Sheraton Springfield Monarch Place Hotel
One Monarch Place • Springfield • Massachusetts • 01144 • Telephone: 413-781-1010

Host
Social Justice Education @ UMASS-Amherst

Theme/Focus
“Critical Liberation Praxis: Creating Transformation for Social Justice”

The UCCS Matrix Center’s WPC9, “Critical Liberation Praxis,” will examine and create practice that focuses on our goals, where we are going (**liberation**), rather than where we are coming from (privilege and oppression). Moving forward from focusing on what we are fighting *against*, WPC9 will provide a forum to examine what we are fighting *for*, and how to get there.

www.uccs.edu/wpc

