Lessons Learned from 9/11: Emergency Management Planning For Urban and Metropolitan Universities

Joseph C. Morreale

Abstract

This paper provides an analysis of the impact of 9/11 on a major urban/metropolitan university in the New York City metropolitan region, namely Pace University. The purpose of this paper is fourfold: (1) to examine the impact of a major catastrophic incident on an urban/metropolitan university; (2) to analyze how the university responded to the unforeseen crisis; (3) to relate the lessons learned from this experience for the use of other urban/metropolitan universities; and (4) to explain what is needed by urban/metropolitan universities in emergency management planning.

The paper is subdivided into five parts. Section I provides an overview of Pace University and places its experience in the context of catastrophic experiences of other universities. Section II provides a review of Pace's response to the 9/11 disaster. The author explains what the university dealt with, how the relief effort was managed, what management methods were effective or ineffective, and what were the immediate lessons learned. This section also summarizes some survey results of key constituencies to Pace University's response to 9/11. Section III offers 10 operating principles learned from the experience. President David A. Caputo provides the main observations. Section IV discusses the plans and policies that have been implemented since 9/11 at Pace with particular focus on four key areas. Section V concludes with the basic principles and best practices necessary for urban/metropolitan universities to be prepared for disaster recovery.

Pace University held a conference in the summer of 2002 on this topic of lessons learned and emergency management planning. It attracted participants across the U.S. from many diverse colleges and universities. The material drawn for this paper comes from that conference as well as the follow up activities by the university based on lessons learned from the experience. The paper should be very useful to practitioners of emergency preparedness, university administrators, faculty and staff, particularly in urban/metropolitan universities, and government and civic leaders of urban and metropolitan areas and regions.

Urban/Metropolitan Universities Facing Catastrophes

Pace University is in the New York City metropolitan region and has four campuses and three other sites where it provides undergraduate and graduate programs. In New York City proper, one campus is located downtown and one site is at midtown New York. Another site was at the World Trade Center (the World Trade Institute), which is now relocated in downtown NYC. Pace's suburban campuses in Westchester County, just north of NYC, are in White Plains, Pleasantville and Briarcliff. The Graduate Center is in White Plains and Hudson Valley Center is at Stewart Airport in the Mid-Hudson Valley. So the university is an urban/metropolitan university with 14,000 students with multiple campuses across more than100 miles from the heart of New York City to the Mid-Hudson Valley. It contains five academic professional schools (business, computer science and information systems, education, law and nursing) and one liberal arts and sciences college. Founded in 1906, it is preparing to celebrate its centennial anniversary in 2006. Pace is committed to its mission of "Opportunitas" and has a long tradition of providing opportunity for a wide variety of students. It also has a strong reputation for civic engagement, innovation and academic excellence.

Pace faced a major catastrophe on September 11, 2001, when two aircraft slammed into the two towers of the World Trade Center. Pace's downtown campus is five blocks from "ground zero" and the university rents residence facilities to students that are even closer. The catastrophe proved to be a major challenge to the university and yet offered many lessons about disaster preparedness. This paper addresses these issues and problems and short and long-term solutions.

Though Pace's situation and the World Trade Center attacks may be unique in many ways (totally unexpected, human-made disaster, national and international ramifications, etc.), nonetheless it should be noted that other universities have suffered and recovered from significant and devastating disasters. We mention these others to provide further insight into disaster planning at major urban/metropolitan universities and refer to the analysis in a previous paper (Morreale and Kirkwood, Jan. 2002).

Such disasters referred to are:

- Earthquakes (California State University, Northridge)
- Floods (University of North Dakota, Colorado State University, University of Houston)
- Hurricanes (University of Miami)
- Terrorist attack (Pace University)

The most recent disasters are Hurricane Ivan at the University of West Florida and Hurricane Charley at Florida Gulf Coast University. We have provided references for these various disasters too.

Response to 9/11

None of us will ever forget the catastrophic tragedy that befell New York City on September 11, 2001. Like hundreds of its downtown neighbors, Pace University was impacted. Pace's main campus is five blocks from "Ground Zero" and the university housed its World Trade Institute in one of the World Trade Center towers. Pace's main campus and another of its facilities directly across the street received minimal damage but some of the university's leased residential facilities sustained minor damages (Caputo 2001). And the university's telephone and data-switching center, which served Pace and the World Trade Institute, was significantly damaged.

The greatest loss was four Pace students and at least thirty-four alumni died in the attack. Fortunately, all of the university's World Trade Institute staff members made it out of the World Trade Center before the twin towers collapsed.

How was the Relief Effort Managed?

On the morning of September 11, 2001, as the first airplane hit one of the towers, the Pace University Board of Trustees was meeting at their Midtown Center, just a few miles from Pace's downtown campus. After being made aware of what was occurring downtown, one of the university's vice-presidents was sent to the downtown campus. Because the university's entire administrative team was at its midtown location, it became Pace's communication center until the loss of telephone services a few days later forced it to move to another Pace campus.

University officials decided not to evacuate the downtown campus. They encouraged students and staff to remain inside and welcomed others who sought shelter. The first floor of the main building was used as a field hospital and triage unit.

As a result of the destruction and devastation in the immediate area, Pace was forced to move about 60 students who had been living in university-leased housing. The remaining residential students were relocated to Pace's Pleasantville campus in Westchester County, about 30 miles away.

Pace administrators couldn't use television, radio to communicate with the community because of around-the-clock emergency broadcasting. Eventually, Pace was able to buy newspaper advertisements in national and regional papers. The university ran three ads telling of the damage to the campus and when and how it would reopen, and thanking all who assisted the university.

All three advertisements listed a toll-free telephone number. Pace established a 24-hour hotline to provide information for anyone affiliated with the university (Caputo 2001). It also sent letters to faculty, staff, and students explaining its efforts following the terrorist attack. Letters also were sent to constituents, students were provided with cell phones to contact their families and free meals were provided in the cafeteria for five days.

During the university's recovery, Pace President David A. Caputo, held daily meetings with his senior staff to assess new developments and plan for each day. Evening meetings were conducted to determine what had to be completed overnight and to assign responsibilities to personnel. President Caputo conducted a series of community meetings on each of Pace's Westchester campuses on the Thursday and Friday following the attacks. And daily community meetings were held when the university reopened to counter rumors and address concerns.

What Management Methods were Effective or Ineffective?

Shortly after reopening, Pace acknowledged the many lives lost as a result of the terrorist attacks. The university held a memorial service on its downtown campus, which was attended by approximately 800 people, including uniformed services representatives. The names of Pace students and alumni killed were read. The memorial service concluded with attendees circling Pace's main downtown building for a candlelight vigil. Similar memorials were conducted on Pace's Westchester campuses. Pace's memorials were an effective way to help create a sense of community and aid in the healing process for its university family.

In honor of those who perished in the terrorist attacks on America, Pace established 75 four-year, full-tuition scholarships, totaling $1.25 million per year for the spouses, partners and children of the victims of the attacks on the World Trade Center and the Pentagon.

What Were the Immediate Lessons Learned?

In the aftermath of the attack on the World Trade Center virtually all of Pace's means of communication were inoperable; cell phones, regular telephones, and Internet service were disabled. Fortunately, the school's email network was functioning and administrators were able to communicate with each other. Yet, no plan addressed how administrators would have communicated with one another had the university's intranet not been functioning. They were forced to improvise.

Similarly, when Pace administrators attempted to communicate information regarding the status of the university and locate students it had not heard from, they were met with obstacles. Media broadcasting was unavailable. No plan addressed alternative means of information distribution and/or communication during a crisis situation.

Pace University officials also made a very prudent decision to assess their actions following the destruction of the World Trade Center. The university mailed out roughly 10,000 questionnaires to obtain constructive criticism. University officials intend to use the feedback from the surveys to help them determine how they would respond more effectively to future disasters.

What Was Learned from Surveying Constituencies

The university president asked the Vice President for Planning, Assessment and Research, Dr. Joseph Morreale, to assess our handling of the 9/11 crisis. A survey was created and sent to all students (resident and commuters), faculty (full-time and part-time), administrators, staff and parents of our students. Here is a quick summary of the survey results:

What Pace did Well:

Processes
- Pace handled the reopening of campus and restarting of classes very well.
- The services of remembrance and gratitude were rated high.
- The community meetings were generally well received.

Offices
- The actions of the president's office, provost's office, security, student life/counseling and human resources were all rated very well and received high praise.
- The telecommunications and information technology offices were generally seen as positive, though there was some criticism and negative rating by full-time residential students in New York. This was understandable due to the loss of telephone and IT services during the first week following the attack.
- The health care unit and admissions/registrar received positive ratings.

Communications
- The Website postings and the 24-hour hotline were given very high marks and were found to be very helpful.
- Newspaper ads were generally seen as helpful.
- C-Grams were generally seen as helpful.

Constituencies
- Pace communicated well with administration/staff, full-time faculty, and full-time commuter students.

What Pace Needs to Improve:

Processes
- Pace must develop a better evacuation plan. The New York City residential students and New York City administration/staff were particularly critical of Pace's actions here.
- Pace needs an improved housing relocation plan.

Offices
- Telecommunications and Information Technology need to be improved and enhanced (Parents were more critical of these two operations). More backup systems are needed to ensure continuation of service in an emergency.

Communications
- Pace needs to reach out to the full-time and part-time commuter students in Westchester. The newspaper ads were not helpful.
- Radio/TV spots were heavily criticized and need to be greatly improved. Pace is just not getting enough coverage in New York City. Full-time students and faculty and administration/staff particularly felt this way. Parents were particularly critical here.

Constituencies
- Pace really needs to improve communications with parents especially in times of emergencies.
- Pace needs to improve communications and services to part-time faculty and part-time commuter students.

Ten Operating Principles in a Catastrophe

In the aftermath of the World Trade Center attack, President Caputo offered the following 10 "operating principles" to other university presidents (Caputo):

1. The safety, security, and well being of faculty, staff, and students is our top priority. Our security officers and maintenance personnel did and continue to do an outstanding job, as did our medical and counseling personnel.
2. While focusing on immediate tasks, it also was important to take a long-term perspective. During each meeting with senior staff in the days following the tragedy, we spent time planning what we needed to do to reopen. But we also did important budgetary analyses to calculate our potential losses, completed a tentative estimate of our insurance coverage, and considered how best to inform and reassure our community. We closed each meeting by asking what more needs to be done and what haven't we thought of?
3. Our excellent relations with local public safety agencies served us well. The university president regularly met with the local police precinct commander and with the fire department leadership in our area. Our campus security leaders are retired New York City police officers whose personal contacts were exceptionally helpful. Without the cooperation of public-safety officials, our response would have been hampered.
4. At a time of crisis, it is especially important to have personal contact with those affected. We made sure our administrative team welcomed faculty, staff, and students back. We all ate in the cafeteria, walked through various buildings, and made sure everyone could talk with us.
5. Our board chair, Aniello Bianco, visited campus shortly after we reopened. He met with faculty, staff, and students and let them know of his personal concern as well as the board's concern. The visit was a major morale boost for the entire campus.
6. It was important for our community to recognize its losses. In late September, we held a memorial service in Manhattan, which was attended by nearly 800 people. Representatives from the uniformed services attended; we read the names of our students and alumni who were lost; and the university board chair and president addressed the gathering. We asked Dr. Kevin Cahill, a noted international medical

expert, to speak, and we closed by circling our building for a candlelight vigil. We held a similar ceremony for our Westchester campuses on October 2. Both encouraged a sense of community.

7. In an unforeseen crisis of such magnitude, it is important to encourage everyone to be flexible. We provided immediate cash grants to our students who had to be relocated, absorbed the increase cost of their housing, provided book vouchers, and even kept the cafeteria open to all students, faculty, staff, and emergency workers at no cost.

8. We believe it important to assess our actions. We have mailed more than 10,000 questionnaires and have spent a portion of each of our administrative meetings evaluating what we did and how we can do better. We are looking at a variety of changes as a result of these discussions, and assessment is a part of every community meeting as we seek feedback. The board will be given the results of those assessment efforts as well as the various changes necessitated by the terrorism.

9. The provost, Dr. Marilyn Jaffe-Ruiz, reached out to faculty leaders about our efforts. She responded to urgent needs to care for laboratory animals by making arrangements for the faculty involved to get into their labs. We consulted extensively before deciding on a revised academic calendar, and we have done our best to attend as many faculty meetings as possible.

10. Don't underestimate the need for counseling. We knew there would be an immediate need and we will continue to offer extensive counseling throughout the year for faculty, staff, and students.

Implementing Change in Three Critical Areas

So what policies have been implemented to make certain that Pace is ready for any future catastrophe? Many things have changed Pace as a result of 9/11. The following focuses on just three main ones: Safety and security, telecommunication and information technology, and counseling services. The author's colleagues, Frank McDonald, Frank Monaco and Richard Shadick, were respectively very helpful in providing these insights.

Safety and Security

First and foremost, the executive director of safety and security conducted a security assessment at the university. Some immediate enhancements to security included adding additional security coordinators, instituting the wearing of identification cards university-wide, expanding the public address system throughout the New York campus and its residence halls, and safety glazing all windows at the downtown campus buildings.

Five emergency communications centers were created, placed and operated throughout the university. The centers were placed in centralized, well-supported locations where designated crisis management team members can assemble to assume their role during emergencies.

Means of communication include voicemail, broadcast messages, website, telephone trees, media contacts (newspaper, television and radio) and emergency service contact numbers. Each location has the name, address, and phone numbers, including emergency contact numbers, of all Pace students, staff and faculty. The centers also include emergency equipment such as flashlights, first aid kits, dust masks and protective gloves, and a supply of food and water. Floor plans for every building on campus are also maintained at the centers.

A security planning consultant was retained to conduct an emergency response planning needs assessment at Pace. Based on that assessment we developed an emergency response plan, which is available on the Pace webpage.

Pace also created a steering committee to develop a more comprehensive emergency response and business continuity plan. The intent of a business continuity plan is to minimize the amount of disruption any future emergency may cause to each department's critical functions. This is accomplished by:

• Establishing an administrative structure within a department to deal with future emergencies;
• Investigating and preplanning appropriate responses to various types of potential emergencies;
• Identifying and implementing changes to current operating procedures that will reduce the department's susceptibility to disruption from certain types of emergencies;
• Coordinating the department's business continuity plan with plans of other departments that either provide services to or receive services from a department;
• Formalizing the department's business continuity plan in written form;
• Maintaining a high level of knowledge and preparedness within the department of the department's plans for continuing operations during emergencies.

A business continuity plan is not an emergency response plan. Pace University's emergency response plan is intended to protect, as much as possible, students, Pace personnel and property from injury or damage during an emergency. A business continuity plan deals with continuing the university's critical functions during and after an emergency until the disruptive circumstances caused by the emergency no longer exist or until a permanent operating response is put in place.

Telecommunications and Information Technology
The impact of 9/11 on Pace's telecommunication and information technology systems was severe. Telephone/dial service to lower Manhattan and Internet services were lost for all Pace campuses and sites. Cell phone usage was very intermittent for days due to antenna distribution and cell overuse. Dormitory phone service on all campuses was affected by the Verizon outage. Clearly, the University needed to develop a telecommunication emergency response plan.

We now have a formal disaster recovery communication plan with a disaster recover team consisting of key IT staff. Pace's primary and alternate ISP routes do not go through the same dial central office or major Internet point-of-presence. Pace maintains a good working relationship with external providers (e.g., Verizon, ATT Wireless, Dell, etc.). Pace also created a disaster recovery site to duplicate mission-critical applications that are housed at Pace's upstate central IT facility at the Briarcliff campus. This second site is located on the downtown campus. Pace also is hooked up to an off campus site in Connecticut to ensure continuous communication and Internet connectivity. And finally, an accurate cell phone directory with university and non-university owned cell phone numbers was created. Alternate email addresses are now recorded on each student's permanent record in our student information systems and counseling services.

Counseling Services

We cannot overstate the importance of including counseling in emergency preparedness planning. We have learned that if there is an emergency or disaster, having a counseling crisis team is essential to triage the situation to determine the populations effected and provide immediate on-site intervention to foster calmness and prevent untoward psychological effects.

This plan has the effect of minimizing the impact of an emergency or crisis fiscally as well as psychologically. Experience has shown that an absence of counseling intervention leads to poor student retention, high rates of worker absenteeism, and an increase in medical and mental health expenses. More importantly, it is critical that the university leadership responds to the psychological needs of the whole university community.

There are three essentials to such an approach to providing counseling services. One is emergency planning and response committee including contingency plans. A second is identifying crucial procedures to follow during a crisis including triage, treatment and referral. Third is outlining essential post intervention protocols for follow-up care and seamless business continuity. Pace instituted all of these and has actively had the opportunity to use them in various crises in the university since 9/11.

Conclusion: Principles of Disaster Preparedness

The first step of preparation for a disaster is to establish a comprehensive multi-hazards emergency response plan. The plan should encompass responses to natural disasters, technical disasters, and human disasters. An emergency response plan will always be a work in progress, continually evolving as society changes. Natural disasters may include flooding, fire, earthquake, wind damage, snow/ice storm, volcanic eruption, epidemic, vermin/insects, and hurricane ("Risk Assessment"). Technical disasters may include power failure, malfunction or failure of central processing unit, failure of system software, failure of application software, electromagnetic interference, explosion, telecommunications failure, loss of physical access to resources, gas leaks,

and communications failure. Human disasters may include malicious damage or destruction of data, robbery/theft/burglary, bomb threats, strikes/picketing, civil disorder, chemical spill, vandalism, sabotage, hazardous material, suicide, and war. How the university responds to these disasters depends on the particular event.

Second, a crisis response team should be established. The team should be trained in response techniques and provided with resources specified in the university's emergency response plan. Members of the team may include students, faculty, staff, administrators, and members of the community who live or work near the campus. The team may also encompass representatives from each office or department on campus. A team leader should be identified. Incident commanders may be selected based on an individual's expertise or knowledge of particular discipline.

A communications plan should be determined. A university's target audience should include the university community, parents, prospective students, alumni, and the general public. It is imperative that a spokesperson be identified to communicate the status of the campus situation and other pertinent information with the university community and the general public by way of the media. The communications plan should also indicate alternative means of communication in the event regular tools of communication fail. Generally, tools of communication include voice mail, broadcast messages, telephone trees, radio, campus newspapers, cell phones, web site, emergency phone lines, walkie-talkies, and faxes.

A university's emergency response plan should also designate a crisis management command center. It may be helpful to select a primary and secondary location in the event that the primary location is unavailable as a result of an emergency. Selecting a location on and off campus also is prudent. The command center should contain a disaster supply kit, which may contain emergency supplies, flashlights, batteries, contact phone numbers, and a copy of the university's emergency response plan.

A sound emergency response plan encompasses an evacuation plan. The evacuation plan should outline where to relocate faculty, staff, and students. The plan should chart evacuation routes in the area surrounding the campus and designate an assembly area outdoors. Area neighborhood businesses, residents and community groups should be partnered in the evacuation plan. Consideration should be given for the assistance of elderly and disabled persons. It should be outlined how campus officials will communicate with the university community during an evacuation.

Emergency response plans should also discuss counseling and support services. Response plans must identify staff members who will provide support services, where the services will be provided, and any equipment needed to extend services.

A facilities shutdown plan is also a key component of an emergency response plan. This plan should address what might prompt the cancellation of classes, who determines if and when the campus will be shut down, and how and where the

university community may obtain information regarding a shutdown of the campus. This plan also should indicate university personnel to remain on campus.

A transportation component may be necessary for a university's emergency response plan. Many schools' students, faculty, and staff commute to the campus by way of automobile or public transportation. It is highly possible for an off-campus crisis to occur that may impede faculty, students, and staff arriving on campus. Also, in the event of an evacuation, it may be necessary to transport people to another location. And in the event that certain facilities are shut down as a result of a disaster, students and faculty may need to be transported to other locations to resume classes and other activities. An outline indicating the university's response to such crises will help to ensure continued efficiency on campus.

During the discussion on revising or establishing an emergency response plan, campus security and community partnerships should be evaluated. Administration should consider if campus security is adequately prepared to handle or assist professionals with multi-hazardous crises on campus. If campus security is not adequately prepared, crisis training should be conducted and a plan detailing officers' training, which establishes realistic goals and expectations, should be created. Expert advice should be sought upon evaluating campus security and its responses to various crisis situations.

Establishing community partnerships to assist in a university's response to an emergency could prove invaluable. School officials should form relationships with their local emergency management or civil defense office, American Red Cross chapter, Salvation Army, and other organizations that specialize in disaster relief efforts. These organizations can serve as excellent resources. Relationships with local professional emergency personnel may prove helpful as well. Administrators should reach out to their local police precinct, fire department/firehouse, emergency medical technicians, and nearby hospitals to establish mutually beneficial relationships. Likewise, partnerships with other academic institutions in the area should be established. Situations may arise in which resources and facilities may need to be shared after a crisis or disaster strikes.

Finally, the entire campus community should be made aware of and trained on what to do in the event of a crisis on campus. Faculty, staff, and students should provide input for training activities in addition to participating in them. Drills and exercises should be conducted preparing individuals for a potential emergency. Also, it would be helpful to determine university personnel who are trained in first aid and CPR. Some institutions designate campus personnel and train them in first aid and CPR.

Planning for disaster preparedness is an ongoing initiative that will take on many different shapes as crisis situations continue to arise. In addition to the above insights, it is also of great importance to learn from colleagues' experiences and those of other urban and metropolitan universities around the world. Not only will shared experiences help guide a university's efforts in planning for any future emergencies, but also a communal relationship may be established between universities worldwide.

Acknowledgements

References

Pace University:

Blumenthal, Judith, "Crisis Management in University Environments," *Journal of Management Inquiry, 4* (1995): 248. ABI/INFORM Global. ProQuest Direct. Pace University Library, White Plains. October 29, 2001, http://www.umi.com/proquest/

Caputo, David A., "We Were There on 9/11 And Afterward," *Trusteeship* (November/December 2001): 8-13.

Kennedy, Mike, "Surviving a Crisis," *American School & University, 72* (1999): 42b, 3p, 1c. ABI/INFORM Global. ProQuest Direct. Pace University Library, White Plains. October 29, 2001, http://www.um.com/proquest/

McDonald, Frank P, "Disaster Planning for Universities: Lessons Learned from 9/11," presented at Emergency Management Training Day, Fordham University (April 27, 2004).

Monaco, Frank, "Disaster Recovery Near the World Trade Center — Lessons Learned," PowerPoint presentation (Summer 2004).

O'Grady, Marijo Russell, "Educating Our Community: Crisis Response in Light of 9/11/01," paper presented at NASPA Region II (2003).

Pierson, Elizabeth, "Contractor From World Trade Center Recovery Heads Campus Cleanup," *Comment* (August 14, 1997): 4.

White, Wendy, et al, "The War Against Terrorism: Legal Issues for Higher Education," National Association of College and University Attorneys virtual seminar (November 30, 2001).

Wilson, Blenda J., "Shaken to the Core: Change and Opportunity in Crisis," *The Education Record 77* (1996): 70. ABI/INFORM Global. ProQuest Direct. Pace University Library, White Plains (October 3, 2001), http://www.umi.com/proquest/

Other Universities:
Adair, Wendy, "Allison Takes Toll on UH," *University of Houston Campus News* (June 18, 2001), http://www.uh.edu/uhcnonline/flood.htm

Boss, Bill, "Tips From a Disaster Expert," *Lessons of Recovery*, Colorado State University (1997-1998) University Relations (1998), http://www.colostate.edu/floodrecovery/tips-from-a-disaster-expert.html

Cinelli, Michael, "Students, Faculty, Staff Hurt by Storm to Receive Helping Hand from UH Community," University of Houston Office of External Communications (June 2001), http://www.uh.edu/admin/medianr/62001/floodaid.htm

Colorado State University, "Public Relations Response to Crisis." *Lessons of Recovery*, (1997-1998), University Relations (1998), http://www.colostate.edu/floodreco...relations-response-to-crisis.htm

Denke, Mark and Ray Gasser, "Organizational Illuminatus: The Effects of Major Exigency at Colorado State University," Colorado State University School of Education (2000), http://www.colostate.edu/Depts/DSA/JOURNAL/2000/illum.html

Dowdy, Daphne, "Business Assistance Available to Flood Victims from UH Small Business Development Center," University of Houston Office of External Communications (June 2001), http://www.uh.edu/admin/media/nr/62001/sbdc_flood.htm

Doucette, Nyree, "Call Center Set Up to Answer Questions," *University of Houston Campus News* (June 2001), http://www.uh.edu/uhcnonline/callcenter.htm

Florida Gulf Coast University, "Response to Hurricane Charley Victims," FGCU (September 2004), http://www.fgcu.edu/in/FGCUcares01.asp

Foote II, Edward T., "Weathering the Storm: Leadership During Crisis," *Educational Record* (Spring/Summer 1996): 63-69.

Konigsberg, Letcia, "UH's Storm Recovery Effort Still Underway," *University of Houston Campus News* (August 23, 2001), http://www.uh.edu/uhcnonline/uhstormrecovery.htm

Papinchak, Kelly, "Hofheinz Pavilion Houses Displaced Staff and Students," *University of Houston Campus News* (June 28, 2001), http://www.uh.edu/uhcnonline/hofheinzhome.htm

"Risk Assessment: Faculty and Staff Guide," University of Washington Records Management Services (1998), http://www.washington.edu/admin/recmgt/risk.assessment.html

"University of North Dakota After Action Report," University of North Dakota School of Education (1997), http://www.und.nodak.edu/flood97/floodund.htm

Woodard, Jamie, "Campus Pulls Together in Wake of Hurricane Ivan," University of West Florida (September 2004), http://uwf.edu/uwfMain/press

Yates, Albert, "Flood Unites Colorado State University Community," *Denver Post* (September 1, 1997): B11. ABI/INFORM Global. ProQuest Direct. Pace University Library, White Plains (October 10, 2001), http://www.umi.com/proquest/

Author Information

Joseph C. Morreale is provost and executive vice president for academic affairs of Pace University. He has been in academics the past 33 years and at Pace the last 13 years. He has held administrative positions as senior associate provost/vice president for planning, assessment and research, associate vice president and vice provost, and chair and professor of the multi-campus masters in public administration and bachelors of science in criminal justice programs.

Joseph C. Morreale
Provost and Executive Vice President
for Academic Affairs
Pace University
One Pace Plaza, 18th Floor
New York, NY 10038-5198
E-mail: jmorreale@pace.edu
Telephone: (212) 346-1956
Fax: (212) 346-1383