Continuity of Instruction

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Emerging Leaders Program 2009/2010

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Executive Summary

Continuity of Instruction planning is an essential function which many colleges and universities have increasingly begun to investigate with the rise in awareness of potential interruptions to class activities, including, but not limited to natural disasters, widespread illness, acts of violence, planned or unexpected construction-related closures, and possible severe weather conditions. The purpose of this report is to gather background information, both internally and externally, and provide recommendations as to how RIT should proceed with Continuity of Instruction planning for the continued advancement of the entire RIT community.

Recommendations

Recommendation 1: Create a Continuity of Instruction Coordinator position at RIT.

Recommendation 2: Every course at RIT needs to use the Content & Grades tools within myCourses at minimum.

Recommendation 3: Every Course/Department needs to create a Course/Department Continuity of Instruction Plan.

Recommendation 4: Every College needs a College/University Continuity of Instruction Plan.

Recommendation 5: A Communication Delivery Plan needs to be created to effectively and consistently communicate with students.

Recommendation 6: Continuity of Instruction plans should be created in tandem with the change to the semester calendar system.

Benefits of Continuity Planning

- Ensures that a higher number of students are kept on track for graduation, even in the event that an emergency may interrupt the normal academic schedule.
- Increases faculty engagement in high-level administrative decision-making processes.
- Reduces financial impact for the University, not limited to reducing tuition refunds.
- Maintain RIT's reputation with parents, prospective students, regional colleges, peer institutions, the Rochester community, and local industry and professional partners in the University's ability to manage a catastrophe.
- Increases communications and collaboration across colleges and with relevant stakeholders.

Model Institutions & Organizations Effectively Planning for Continuity of Instruction

- East Carolina University's *Continuity of Instruction: During a Catastrophic Event*
- University of Maryland University College's *Classroom Interruption Planning Guide*
- Fairleigh Dickinson University's *Faculty Quick Start Guide: Preparing to Continue Instruction during an Emergency*
- University of California at Berkeley's *Continuity Planning*
- Sloan-C Academic Continuity

Problem Statement

The following problem statement was provided to the Continuity of Instruction Team at the beginning of the Emerging Leaders Program (Appendix A).

> *"Many different kinds of events can interrupt instruction. Short or extended illness, campus closures due to weather or man-made events, electrical or computer network outages, and other unanticipated situations can all bring instruction and learning to a halt. What can RIT do in general and what can instructors in particular do to maintain Continuity of Instruction in the face of an interruption? What steps do faculty members need to take? How do we inform students? What policies should be in place?"*

Introduction

The Emerging Leaders Program at Rochester Institute of Technology (RIT) is a new initiative designed to provide faculty and staff with opportunities to learn theories and practices that enhance organizational leadership skills. The program also provides the opportunity to address complex challenges faced by the University. Six teams of participants consisting of full-time faculty and staff members are assigned to a project aimed at solving a specific problem. Team projects are action-oriented and provide opportunities for both experiential learning and for application of the leadership theories studied, which are beneficial for the University. Each team is also assigned a VP administrator and a team mentor. Provost Jeremy Haefner is the team administrative sponsor, and Chris Tsai is the team mentor for the team problem of "Continuity of Instruction".

Our team is charged with reviewing RIT's current plan for Continuity of Instruction and providing recommendations to strengthen RIT's response to potential short and long term interruptions. Continuity of Instruction planning is a critical element of student academic success and progression towards graduation. RIT and relevant partners and stakeholders benefit when faculty are trained and prepared to continue instruction in the event of a pandemic outbreak, catastrophe, or other unanticipated occurrence. Continuity of Instruction plans directly impact student enrollment, and attrition and retention, with significant financial consequences for students, their families and the University. These plans minimize the potential for students to withdraw from classes in the event of an emergency, and lessen the need to refund tuition. These plans also provide structure and normalcy for our community; since RIT is an important employer in the Rochester area and for professional and industry partners, who strongly rely on RIT graduates, coop students, and business relationships.

We began by reviewing RIT's current Business Continuity Plan (BCP), which focuses on a flu pandemic. We also gathered information from other RIT units, such as the Business Continuity Office, Information Technology Services (ITS), and the Wallace Center, which are familiar with the problem and have begun work to formulate possible solutions. We then reviewed plans from other universities, specifically noting their effectiveness. As technology is central to the development of Continuity of Instruction plans, during the data-gathering phase, we collected statistics on RIT myCourses usage and online and blended courses with campus section counterparts.

Next, we identified stakeholders that could be interviewed for further insight as to how they think of the problem, and their suggestions for addressing the problem. Primary stakeholders consisted of students, faculty and administration. As RIT is a tuition driven university, it was important for us to gather data on both academic and budgetary implications of having or not having a Continuity of Instruction plan. In

addition to the review of current Continuity of Instruction plans from the Business Continuity Office, ITS and the Wallace Center, we also interviewed them as significant stakeholders for this problem. We identified partners as the groups at RIT that will help to implement and support the recommendations that are included in this Continuity of Instruction plan. Our recommendations followed the review and interview phase, and the data collection phase.

Our final report includes an overview of RIT's current plans and those of other universities to maintain Continuity of Instruction. Based on our review of existing plans and communications with relevant stakeholders, we have developed recommendations that aim to improve RIT Continuity of Instruction and communication plans. RIT curricula are diverse, with courses that require lab work, workshops, professional components and other activities that present unique challenges in continuing education during an emergency. We recognize that colleges and departments maintain the academic freedom to determine Continuity of Instruction plans that are appropriate for their unique programs and courses, as long as these plans are consistent with the general guidelines provided by the University.

The University's conversion to a semester calendar in 2013 provides an opportune time for faculty to develop and integrate Continuity of Instruction plans into the redesign of their courses. Continuity of Instruction can constitute a component of faculty examination of current academic programs and course offerings. This planning enhances best curriculum practices and is consistent with RIT's strategic objectives regarding student success and learning outcomes, career orientation, and general education. During Phases 1 and 2 of the calendar conversion process, as colleges and departments review current academic programs and courses, the development and integration of Continuity of Instruction plans can be included as an objective of the redesign process. During the Post-Conversion Phase, departments and colleges can audit their courses to ensure that they contain Continuity of Instruction plans.

Stakeholders & Partners

Primary stakeholders were identified to be:

- Students

  Students are directly affected by the continuation of instruction or lack of instruction during times of emergency. Their ability to complete courses that are offered sequentially or otherwise and to graduate on time is significantly hampered by the lack of a Continuity of Instruction plan. The financial consequences of giving students an incomplete grade or student withdrawal from courses could be substantial.

  With respect to unique populations of RIT students, special considerations to the modes of course delivery and accessibility should be addressed by all faculty in their Continuity of Instruction planning, as is expected for all course offerings at RIT.

- Faculty

  Faculty are responsible for maintaining communication with all students and administering delivery of course content in order to keep students on track for course completion.

- ITS and Wallace Center staff

  ITS and the Wallace Center staff are responsible for the collaboration and facilitation of RIT's technological infrastructure, and for assisting and training faculty in the use of the myCourses system.

- Student Affairs

  Student Affairs communicates with students, parents and RIT faculty and staff both through administrative offices and through student governance.

- Finance & Administration

  Finance & Administration is considered a primary stakeholder because of the potential costs associated with loss of facilities, possible tuition reimbursement, and possible loss of tuition revenue and classroom/lab facilitation.

Secondary stakeholders were identified as:

- Entities being able to provide assistance in continuation of instruction situations. Regional colleges, peer institutions and the Rochester community, and RIT industry and professional partners.

- Entities being financially and otherwise impacted by disruptions in education. Parents, faculty and staff who may be furloughed, the Rochester community, and RIT industry and professional partners.

- Entities being unable or restricted in the ability to engage in daily University operations. Students, faculty and staff, and RIT industry and professional partners.

Internal Institute Partners:

We identified RIT internal partners as groups at RIT that will help to implement and support the recommendations that are included in a Continuity of Instruction plan. These partners include:

- The Business Continuity Office, which can collaborate with faculty during catastrophic events as the office handles emergency preparedness and risk management.
- ITS and the Wallace Center collaborate with faculty in developing the necessary technological infrastructure during times of emergency, and in delivering continuation of instruction.

Framing the Challenge

Increased attention surrounding Continuity of Instruction at colleges and universities around the world has been evident over the past five years. Both the avian flu pandemic in 2003 and the more recent H1N1 (swine) flu outbreaks have caused a focus on the potential risks associated with increased amounts of absenteeism from faculty, staff and students and the potential implications of those situations. As the frequency and affect of pandemic type illnesses increase, drawing a significant amount of attention from the media, we must also make sure to broaden the focus of Continuity of Instruction planning to include natural disasters, acts of violence, planned or unexpected construction-related closures, and possible severe weather conditions. These events may potentially affect not only the loss of personnel, but also the loss of access to facilities in which to continue education or the loss of the technology that supports our day-to-day tasks. Any of these circumstances could cause potential interruptions in instructional activities, while some of these interruptions may be more likely to happen than others. This proposal aims to provide solutions for diverse situations with varying degrees of severity, while keeping in mind the probability of the event occurring and the amount of time needed to prepare for different interruptions that may arise.

Based on the above-mentioned circumstances, the following project scope was defined and included in the project charge (Appendix A).

> ***Project Scope:***
> *The scope of the project will include a review of RIT's current plan for Continuity of Instruction and going forward, the team will offer recommendations to strengthen RIT's response to potential short and long term interruptions.*
>
> *Specifically, the scope of the project will focus on the loss of three major categories and their impact on the Continuity of Instruction at RIT: loss of people, loss of technology, and the loss of facilities. The focus will not be on the specific event that results in the loss of any one of these categories or the emergency preparedness plans that may respond to these events.*
>
> *This project will address lack of continuity in instruction for events that are one week or greater. Therefore, we exclude events that have an impact less than one week, as we expect that instruction can be resumed or maintained within the domain of the individual faculty member or college. Continuity of Instruction plans will be created for events that last between one to two weeks, three to five weeks, along with events that last longer than five weeks since the recommendations in each of these situations may vary.*
>
> *The Continuity of Instruction plans generated as a result of this project will offer recommendations at two levels. The first level, the individual and departmental level, will be created, implemented, and monitored by faculty members and department chairs. The second*

level, the college and university level, will be created, implemented, and monitored by deans and senior university administration. These plans are not meant to be implemented exclusively, but are complimentary of each other and mutually reinforcing.

A polarity map (Seidler, 2009) was also created to further analyze the challenge of Continuity of Instruction. A polarity map is typically used to evaluate the positive and negative effects that will result from two opposing solutions to a problem. The goal of completing a polarity map diagram is to find the balance between the two polarities where the best of both solutions can be used to solve the problem at hand. Figure 1 shows the polarity map created to analyze the balance between a spontaneous response versus a planned response to Continuity of Instruction. It is clear from this analysis that focusing the solution for Continuity of Instruction on either pole would have potential negative impacts. A response during an interruption of instruction that was completely spontaneous would not be effective financially for the University or when considering the quality and consistency of the response that would be generated without prior planning. However, it would also not be beneficial to the University to spend a significant amount of time on an overly thorough planned response that would require significant time and resources prior to an event that may not occur.

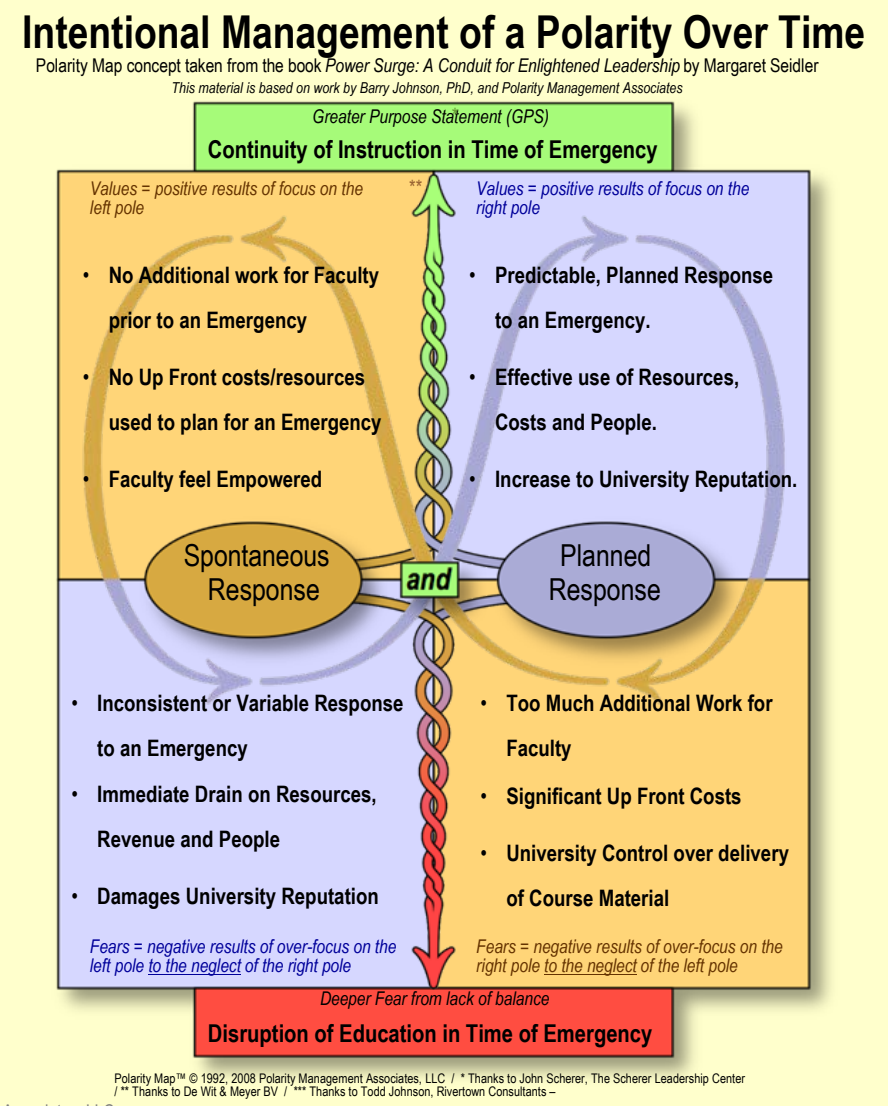

Figure 1

In addition to the polarity map, the project scope statement was analyzed further and the following scope grid was created to clearly outline the circumstances that are not included in the scope and those that are included, with potential recommendations for those individual circumstances. As seen in the first row of the scope grid, any interruptions to instructional activities that will affect only one class session are not included in the scope of this proposal. The events that could potentially cause an interruption to one class session are common and we believe the faculty should have the autonomy in their courses to account for the interruption in whatever fashion best suits that course and individual circumstance. Based on the analysis of the polarity map regarding overly planned responses, it is not the intent of this proposal to spend a significant amount of time planning for events that are currently being handled adequately without a significant amount of pre-planning activities.

The next section of circumstances that would cause an interruption in educational activities for any period greater than 1 class session through 5 weeks of the quarter would be included in the scope of the project. As seen in Figure 2, some potential recommendations for both the individual faculty member and/or department chair to consider, as well as recommendations that will need to be considered at the college and/or university level are provided. The same type of analysis was completed for events that may last longer than 5 weeks and the potential solutions in those situations also provided. Since the severity of the interruption is significantly increased in this situation, alternate recommendations may need to be considered. As can be seen in the diagram, the loss of technology for a period of greater than five weeks has been excluded from the scope of this proposal. This decision is based on data gathered from staff supporting the technological infrastructure on campus. They expressed that the likelihood of an event occurring in that time frame is so minimal, that the planning for that situation would not be beneficial.

The scope diagram does not indicate in which week in the quarter the interruption occurs and how the response may vary depending on the course schedule. This diagram is intended to help focus the project and the possibilities that need to be addressed, based on the type of interruption that may occur and the length that it may impact the campus. The full explanation and background for these recommendations and more are included in the Recommendations section of this report.

Project Scope		People	Technologies	Facilities
1 Class Session	Individual/Department	x	x	x
	College/University	x	x	x
> 1 Class Session – 5 Weeks	Individual/Department	○ Backup faculty to cover classes ○ Move materials online	○ Back up materials for course ○ Continuity plan exists in syllabus for students to do independent work ○ Emergency alert system used to send messages	○ Move materials online ○ Move classes to another building/area on campus ○ Individual faculty modify syllabus to account for missed classes ○ Additional class time/activities scheduled upon return to campus
	College/University	○ Incompletes, extensions discouraged	○ Archives/hard copies of course materials are managed by department	○ Coordination of available space on campus for relocation of classes
> 5 Weeks	Individual/Department	○ Merging classes with online/blended counterparts ○ Replace faculty member with adjunct or graduate students	Ø	○ Identify possible partnerships for relocation of classes
	College/University	○ Incompletes/withdraws acceptable where no other option is adequate	Ø	○ Create partnerships with regional colleges/organizations where classes can be held for longer periods of time

X – area is out of scope of this project

Ø – not included in scope based on low probability of occurrence

Figure 2

The Current Condition at RIT

Continuity of Instruction preparation is complex and multi-faceted. Therefore, this section includes an overview of the current business continuity efforts, the financial implications related to continuity planning and the risks associated with planning for interruptions in instruction, the technological infrastructure currently in place, the current resources available to faculty for continuity planning, and impressions from RIT faculty, staff and students.

Business Continuity Perspective

RIT's Comprehensive Business Continuity Program (BCP) was developed by the Business Continuity Office under the leadership of Director Lynn Daley. The plan is a comprehensive guideline based on a mission containing the priorities of protecting human life; supporting health, safety and basic care services; maintaining services; assessing damages; and restoring operations at RIT.

The BCP is based on assumptions that emergencies happen in a variety of complexities and magnitudes, requiring different response levels outlined in the report. The BCP describes four phases for establishing Pre-Incident Planning, Emergency Response, Crisis Management and Operational Recovery. It then proceeds to deal with Emergency Communications established in part to prevent the erosion of RIT's reputation in the surrounding community. The BCP specifies the importance of preparation and training for an emergency situation. Training should be done at all levels of the University – from specifically established emergency response teams to RIT staff, students, faculty and leadership. The delegation of Organizational Roles and Responsibilities for various offices and levels of RIT's management before, during and after an emergency are listed. Appendices outlining tabletop exercises complete the BCP.

University facilities, personnel, and technologies were identified as resources critical to continuing instruction. The loss of any of these resources would constrain Continuity of Instruction. We examined scenarios in which one of these resources was lost to determine its potential impacts. For example, what happens when a building is inaccessible? Ms. Daley also provided us with a list of recent unplanned power outages and other events that have affected access to the RIT technology system and to the campus. These include the Ice Storm of Spring 2003, the Northeast Blackout of 2003, the Crossroads Shooting of 2004, the Power Outage of Spring 2007, the Telephone Threat of Spring 2008 and Information Security Incidents, one of which significantly impacted Golisano College of Computing & Information Sciences (GCCIS) during the 2009 academic year. The H1N1 Pandemic of 2009 has also resulted in lost class time and loss of academic support. Information provided by Ms. Daley was critical as we developed the project scope, based on the likelihood of a catastrophic occurrence. Ms. Daley supported the idea of conducting a tabletop exercise to gather data and recommended that the administration periodically engage in tabletop exercises to review and enhance existing plans.

BCP Description

The Business Continuity Office is responsible for ensuring that RIT is able to respond to incidents quickly and return to normal operations as soon as possible with the least amount of impact to the campus community. The department's vision is to have a comprehensive plan that is sufficiently resilient to address any critical incident RIT may face. The Comprehensive Business Continuity Program (BCP) articulates the manner in which the University will approach continuity. The BCP identifies potential impacts that threaten the organization, provides the framework for building resilience and builds capability for effective emergency response, crisis management and operational recovery. It also incorporates crisis communications, training and audits.

The BCP covers five steps for response to incidents as follows:

Pre-Incident Planning
Pre-incident planning has the following components:

- Risk Assessment: Identification and assessment of risks based on their probability and impact.
- Business Impact Assessment: Quantification of the impact of a disruption to a process. By understanding the relative value of processes, it identifies those processes for which business continuity and technical disaster recovery plans are most essential.
- Emergency Response Plan: A plan that includes procedures to be followed during an emergency including: reporting an event, responding to particular hazards, evacuation or shelter in place, changes in operational status.
- Business Recovery Plan: A plan for how an organization will resume partially or completely interrupted critical processes within a predetermined time after a disaster or disruption.
- Disaster Recovery Plan: A plan for how an organization will recover data, hardware and software that may partially or completely interrupt critical processes, within a predetermined time after a disaster or disruption.

Emergency Response
This phase occurs when an emergency has occurred or is about to occur and emergency responders have been dispatched to the scene, but the RIT Critical Incident Management Program (CIMP) has not been activated and the CIMP team has not been mobilized. The *RIT Emergency Response Plan* details response priorities, responsibilities and procedures in response to certain hazards. Emergency Communications are critical to emergency response. Informing the campus community as soon as possible that an emergency situation exists and providing direction on what to do could mean the difference between life and death. Emergency Communications are addressed specifically in the Emergency Response Plan.

Crisis Communication
Aside from tangible damage, a crisis can also destroy an institution's reputation. The longer a crisis goes on, the more damage it can do to public support, employee and student morale, enrollment and fund raising. Therefore, it is necessary to handle crises in a swift and organized manner. University News is responsible for developing a crisis communications plan that deals specifically with crisis communication strategies for likely scenarios. The RIT University News Service crisis communications plan addresses scenarios, media relations, news conferences, and other communications information.

Crisis Management
RIT uses the CIMP that is modeled after the National Incident Management System (NIMS). It is a modular emergency management system designed for all hazards and levels of emergency response. This system creates a standardized approach and organizational structure for managing incidents. Use of CIMP at the University facilitates the University's ability to communicate and coordinate response actions with other jurisdictions and external emergency response agencies. As a management system, CIMP helps to mitigate the incident risks by providing accurate information, strict accountability, planning and cost-effective operations and logistical support for any incident. The CIMP is organized around five major management activities: Incident Command, Planning and Analysis, Operations and Implementation, Resource Coordination and Finance & Administration.

Operational Recovery
Operational Recovery is the final phase in business continuity. The primary purpose of this phase is to ensure that critical operations continue after an incident and to quickly resume normal operations. This phase begins when the campus has been secured after an emergency and it is safe to begin recovery operations. The incident has passed, but University operations have not been completely restored. There are, in general, two types of operational recovery:

- Business Recovery - deals specifically with the recovery of a key function or department in the event of a disaster. Included in this category is Academic Continuity, which deals specifically with how to ensure the continuity of teaching, learning, research and scholarship. RIT has formed two teams to address these issues.
    - Business Recovery Project Team
    - Academic Continuity Team
- Disaster Recovery - deals with the technical component of recovery, including the resources, actions, tasks and data required to manage the technology recovery effort.

Financial Perspective

Our group met with Dr. James Watters, Senior Vice President for Finance & Administration, to discuss his thoughts on the scope of the Continuity of Instruction problem. His comments gave us reason to narrow the scope to a more reasonable level. We also confirmed RIT's reliance on tuition to fund the budget.

From a Finance & Administration viewpoint, the most important concern is to continue receiving tuition dollars to remain viable. Fifty-seven percent of our budget of $600,000,000 is funded by tuition. A revenue loss due to the University being unable to provide academic instruction or fulfill requirements for the awarding of accredited degrees would have immediate and significant impact. We compared our current financial state to the financial state faced by Tulane University following the catastrophic events that happened during Hurricane Katrina.

Tulane had an enrollment of 13,200 students pre-Katrina and for the fall of 2006; post-Katrina, the enrollment dropped by 24% to approximately 10,000 students. The University was also faced with infrastructure damages totaling over $600,000,000. In the unlikely event that such a major event would happen at RIT, the budget would be devastated. A corresponding loss of 24% of our students would equate to approximately $81,235,500 less in tuition dollar revenue.

Currently RIT's budget has a contingency for a loss in tuition revenue in the amount of just under $10,000,000. Once this amount is spent, we would have to reduce costs through program elimination, staff reductions and drastic budget changes. At Xavier University in New Orleans, faculty and staff counts of 250 and 650 respectively were reduced to 176 and 240. The presidents at both Tulane and Xavier invoked executive privilege to take control of the overall budget and make the extreme changes needed. Job loss at RIT would create a major barrier to continuing programs and would create an unsustainable situation for recovery or growth. We acknowledge that a catastrophe of this magnitude is unlikely and we use it only as a basis for a worst-case example. It also serves as a wake up call for anyone who is unaware of our dependency on tuition revenue for funding the budget.

By examining our interpretation of possible causes of interruptions of instruction, we found that the three most significant possibilities were loss of people, loss of technology and loss of facilities.

Loss of People
In speaking with Dr. Watters, we learned that the RIT Business Continuity Office was formed in response to the threat of the avian flu in early 2006. This threat came in the form of people being unavailable to perform their work responsibilities. This situation could be caused by RIT employees being ill, their family members being ill or the possibility that New York State decided to close public elementary and high schools, which would force RIT employees to stay home with their children. Our inability to deliver instruction could very well be dictated by external public policy beyond RIT's control.

Loss of Technology and Loss of Facilities
Loss of technologies and the loss of facilities seem much more likely to happen and have in fact occurred on campus. Lynn Daley supplied a list of some of these recent events:

- Ice Storm of Spring 2003 (power outages and limited ability to access RIT)
- Northeast Blackout of 2003 (power outage leading to network failures, etc.)
- Crossroads Shooting of 2004 (impaired access to facilities)
- Power Outage of Spring 2007 (network loss just before midterms)
- Telephone Threat of Spring 2008
- Information Security Incidents (one of these significantly affected the GCCIS – which had to rebuild over 40 desktops and laptops. Completed prior to classes beginning on Monday)
- 2009 H1N1 (students, staff and faculty ill leading to lost class time and academic support)

The RIT Facility Management Services department has prepared for these events in order to ensure minimum downtime. Our biggest concern is with the loss of power. RIT has contracted with regional suppliers for the use of industrial generators if needed to supply electrical power to campus. These generators would be available within 24 hours and can be setup to power the residence halls, the field house and other main facilities. Each new building construction project has incorporated a plan for easy access to a local power supply such as a generator.

RIT is also preparing older areas of campus for continued use as routine maintenance and repair is performed. Some instances of work done during the initial site construction in 1969 contributed to some recent failures. The water-main break, which flooded the first floor of Building 7 in the 1990's, was in part due to pipe preparation codes, which did not meet the expectations and requirements of today's standards. Heating/cooling issues on campus are also being addressed because of the age of the infrastructure. We are currently working to update this with $30 million invested to update boilers and build redundancy into the system.

In examining what RIT has prepared for and what contingency plans are in place, we felt that a reduction in scope would be appropriate. In further discussing refund policies in place at RIT, there is no policy that covers a situation of this magnitude. Since there are too many variables to consider in creating a policy that would be effective for every situation, any discussion about refunds would be done on an ad hoc basis. These discussions would occur at the Executive Policy Team level and would be based on the decisions of the Provost concerning the granting of academic credit.

Technological Perspective

We met with Dave Hostetter, the Associate CIO to discuss ITS capabilities and continuation of service plans. His observations were that back up plans are dictated by the amount of money spent. There is a point of diminishing returns for creating redundant backup systems and equipment. With changes in technology occurring so rapidly, equipment would become outdated before it was ever used. The speed of recovery is another element dictated by the budget. More money spent translates into quicker recovery speed.

The RIT Data Center located in Building 10 has its own established backup power supply, which would take over in the event of a loss of power. Mr. Hostetter made the point that we may be able to supply power to our Data Center, but there could be a loss of power regionally, which would severely limit the ability of students, faculty and staff to work from home. ITS has central support of the mainframe in Atlanta and Oracle functions in Texas. Each has backup redundancy and can be regenerated within 72 hours. All functions would be restored as long as connectivity is available.

Campus email, which would be a major source of on-line communication for planning and change over to distance instruction, has flexibility in that most faculty and staff are on email, students have moved to Gmail hosted by Google and many students also use other services such as AOL and Yahoo. Server capacity for an increase in email traffic would not present a problem. By advance rollout of "Remote" PC or Mac capabilities, employees could access their office desktop on an alternate computer in order to have use of all tools and files.

A physical loss of Building 10 where the Data Center is housed would be an issue. There are sufficient backups but the systems are not mirrored. Instant start up would not be possible. New equipment would be needed and then the backups would be used to restore the system. Having mirrors of every system is neither financially possible nor practical. Obsolescence would doom a plan to failure with equipment being outdated by the time it might be needed. The Data Center servers, equipment and infrastructure would take anywhere from one to two weeks to rebuild from a catastrophic event such as a flood or fire. An important consideration is the order of restoration of critical functions and how that would affect the tools needed for online learning or general functionality of the campus. A new Data Center is currently being planned as part of the construction of the Sustainability annex for the CIMS building. This will increase RIT's protection against loss of technology by creating more redundancy and updating equipment.

Optimum security components of the University network and the surrounding linkage of our various departments ensure virtual immunity to any virus, spyware, malware or attack from outside hackers. Any attacks would be dealt with swiftly and no problems that may occur would be expected to cause a major outage.

Mr. Hostetter reminded us that many instructors maintain their own electronic message boards, websites, twitter accounts, etc. They would be more inclined to use these methods for disseminating their course material. This also is evident in the number of IT systems that exist in the different colleges. There are many software tools and systems on campus that are not supported by ITS, which creates a very decentralized approach. About half of the systems on campus are not centrally supported by ITS. College of Imaging Arts & Sciences has a stand-alone system apart from ITS that involves Macs instead of PCs, GCCIS has its own system, as does NTID.

Ken Kindler, myCourses System Administrator for The Wallace Center at RIT provided information regarding myCourses, RIT's course management system, which supports the online delivery and communication between faculty and students within courses. The use of this system is vital during an emergency for continuation of instruction.

Mr. Kindler explained that the myCourses servers are currently located in the RIT Data Center. There are three application servers, one file server, one utility server, one database server, and one development server. There is no redundancy in the servers currently, other than the three application servers that can share system load if needed in case of hardware malfunctions, and these are all located in the same physical location. Data backups are stored at a co-location facility on John Street, within close proximity to campus.

If the servers in the Data Center were not available or go offline, the system would not be available. There would be no loss of data because of the off-site backup, but it would require at least one to two days to get servers in place if there is an issue in the Data Center and at least six to seven days to get the system back up, including the restoration process from off-site. There are currently 2.87 terabytes of information on myCourses, which constitutes a huge amount of data. Restoring data from backup would also involve Desire2Learn, the vendor that supplies the software application of myCourses. Their schedule would need to be considered as well in the restoration process.

There are some initiatives being worked on that could potentially reduce the time needed to restore myCourses in the event of an emergency and make the process simpler for those involved. Ken Kindler, in collaboration with ITS, is working towards the ability to purge data from the system so that only two years of previous course offerings were stored on the system. This would significantly reduce the data on the system, so a restore from the off-site backups would require less time. Also, there are efforts to move towards a virtualization model for servers. This virtualized model could bring systems online faster in a different location with servers that are still online, thus reducing response time as well.

We also discussed the possibility of more faculty, staff, and students using myCourses in the event of an emergency. Mr. Kindler indicated the capacity of myCourses on current hardware should be able to handle all of campus using it during an emergency. The virtualization of the system could guarantee this would be a non-issue, since during an emergency more space/resources could be given to the system quickly to account for a heavier load. However, it will be necessary to prioritize tools that need to remain operational during an emergency, as all tools cannot be kept running.

Time and resources would also need to be considered for preparation of documentation and training for faculty to respond to an emergency utilizing myCourses. The Wallace Center staff is currently set up to handle directing faculty to resources and answering quick questions, but it is not scalable to provide individual support to each faculty member. The best solution would be to make sure that all faculty have the necessary training on the components of the system prior to an emergency, so that each can respond as necessary without additional training. There is a need to manage the expectation of faculty to prepare, for example, content and grades only in myCourses, and not all components of the system.

The benefits of relying on myCourses during the event of an emergency are two-fold. First, communication to students needs to be clear and consistent. MyCourses is the ideal tool to communicate to all students regarding all courses on how each instructor will handle Continuity of Instruction. Second, in the event of an emergency, not all systems that support teaching and learning can realistically be restored or made available instantly. MyCourses is the most widely used tool with broad functionality to support course communication and feedback. Therefore, myCourses would be the system given priority for restoration during an emergency and then maintained throughout the event.

Mr. Kindler suggested the creation of a broad team from across campus to discuss continuity plans, including clear guidelines for sharing of course materials during emergencies, faculty members access to course shells, and who may need access in an emergency (scheduling officers/department chairs/deans). This is especially important in the event a replacement or substitute instructor needs to be assigned to a course.

Current Continuity of Instruction Resources

Currently at RIT there is no official policy or procedure in place that requires faculty to plan for Continuity of Instruction. However, the issue of continuity planning has been discussed and a significant amount of communication has been distributed to all RIT faculty, especially over the last academic year. The rise in H1N1 flu cases over the past year has increased the focus on this issue at many universities and colleges. The issue has been brought back to the forefront at RIT as well, but it is not the first time pandemic planning has been considered at the University. As a result of previous flu outbreak scares, the Business Continuity Office was created and charged with evaluating business continuity plans for the University. As well, a Pandemic Planning team was initiated to help faculty, staff, and students plan for that type of emergency situation. However, Continuity of Instruction planning was only a small component of these initiatives.

The following are excerpts from university-wide communications sent from Dr. Jeremy Haefner, Provost and Senior Vice President for Academic Affairs, regarding Continuity of Instruction planning, and including suggestions that faculty may consider in different emergency situations.

- September 3, 2009 - **"H1N1 Flu"**

"Faculty can be prepared by developing a 'course contingency' plan. Do you use myCourses? If not, this is a great time and reason to put your course materials up in myCourses. This way, students who are infected and need to miss class can still get vital information about the course and you can still reach your students if you become sick. Do you have a colleague in your department who might substitute for you? Think about having a conversation with that individual now. Use your course syllabus to clearly set expectations for students and yourself. Finally, work with your department chair – they want to be prepared just like you."

- September 15, 2009 - **"Planning for Instructional Continuity"**

"Syllabi should include sufficient information about assignments and other learning activities to allow students to engage in a period of self-study, as needed. Let students know in writing that under certain circumstances, you may have to alter course requirements, assignment deadlines, and grading procedures; and the University may have to alter the quarter calendar. Given that the academic year is underway and your fall syllabi are already prepared, you may wish to distribute an addendum to students containing this information.

Review your attendance policy, and consider how you might modify it to help students who are unable to attend class to meet the course requirements without penalty. It is likely that students will not have medical verification.

You will need an alternative means - probably electronic - of communicating with students, and for receiving and returning student assignments. Our course management system, myCourses, is well suited for this communication."

- October 30, 2009 - **"Reminder - Planning for Instructional Continuity"**

"Review your attendance policy, and consider how you might modify it to help students who are unable to attend class or take exams to meet the course requirements without penalty. It is likely that students will not have medical verification as they are asked to self-isolate themselves. Please do not ask your students to provide a written excuse from either the RIT Student Health Center or their personal physicians. In the event of a significant H1N1 outbreak that impacts the academic delivery of courses or exams, the campus will turn to department chairs for their leadership in managing these issues."

- January 5, 2010 - **"Instructional Continuity for the Remaining Academic Calendar"**
  Included *Faculty Quick Start Guide: Preparing a Continuity of Instruction Plan*

  Step 1: Learn to Use myCourses
  Step 2: Develop a Course Preparation Plan
  Step 3: Consider Other Course Delivery Options
  Step 4: Explain Your Plan and Exchange Contact Information on the First Day of Classes
  Step 5: Share Your Plan with Your Department Chair, School Director, and/or Dean of Your College
  Step 6: Understanding Your Help Resources

The *Faculty Quick Start Guide: Preparing a Continuity of Instruction Plan* is the first attempt to provide RIT faculty with a step-by-step process for continuity planning. This document focused primarily on the possibility of high absenteeism that may result from pandemic situations that would affect faculty, staff, or students. Therefore, the recommendations provided rely heavily on online-based course delivery options. Since these types of situations are the most recent and widespread areas of concerns, it seems

appropriate to focus on those continuity planning issues first. However, the recommendations in this report aim to address continuity planning at a broader level, including situations where there may be a loss of technological infrastructure and the loss of facilities used to administer classes.

Many of the potential solutions and recommendations provided in the communications from the Provost and the *Faculty Quick Start Guide: Preparing a Continuity of Instruction Plan* have been incorporated into the recommendations of this report.

Impressions of RIT Faculty, Staff & Students

Continuity of Instruction planning can only be successful with the thoughtful incorporation of the perspectives of the faculty who will be ultimately responsible for creating and maintaining continuity plans for the courses they teach. It is widely acknowledged that Continuity of Instruction planning will cause an additional workload for faculty members. However, through discussions with faculty representatives, looking closer into survey responses from faculty, and analysis of the actions of faculty currently, we believe the culture of RIT is already open to the idea of continuity planning and many faculty already have the necessary skills to begin the process.

Dr. Eileen Feeney Bushnell, Chair of Academic Senate, was interviewed and provided valuable insight regarding faculty perspectives on the issue of Continuity of Instruction. Constraints to faculty buy-in regarding the necessity of developing these plans include perceptions that a mandated plan infringes on academic freedom, a lack of knowledge of the likelihood of a catastrophic occurrence, divergent and unique college and departmental needs, which makes it difficult to have a comprehensive and university wide plan, and lack of understanding of the negative financial implications and other undesirable ramifications encountered in the event of a catastrophe. Chronic problems that limit the faculty's ability to develop plans include lack of training with myCourses and current teaching loads, which rightfully demand the bulk of faculty time. However, according to Dr. Bushnell, exciting possibilities exist to progress from resistance or indifference, to buy-in and collaboration in developing and implementing Continuity of Instruction plans. These possibilities include a more respected and financially viable University, collaboration with local and regional universities and a greater percentage of faculty that are familiar and well trained with the myCourses system.

Since the use of the RIT course management system, myCourses, will be such a large factor in the process of Continuity of Instruction, much of the faculty's concern with the topic relate to the skills required and time needed to use such a system. Interestingly, many faculty at RIT are already actively using myCourses in some manner, from posting their syllabi and student grades to offering completely online courses through the system. The Wallace Center at RIT reports that during the 2008/2009 academic year, 1,399 (74%) faculty used myCourses in at least one of their courses. This accounts for 6,595 (61%) course sections using myCourses in that year. A large percentage of faculty use the system in some way to supplement their classes on a voluntary basis. It seems very possible that all faculty at RIT could leverage the benefits of the system for the purposes of Continuity of Instruction planning.

The Wallace Center was also able to provide data on the numbers of online or blended course offerings at RIT. These courses will be more likely to easily adapt to Continuity of Instruction planning, since some or all of their course materials have already been administered online. Of all course offerings at RIT, 14% were offered at one time in the online or blended format since the fall of 2007 (20071). This is not a large percentage of courses, but faculty teaching these courses will be able to plan for interruption in instruction more readily and can be used as examples for faculty who are new to the process.

Recently, the Institute on Effective Teaching Committee (IETC) administered a survey to all RIT faculty on their use of myCourses, including their opinions on specific features they found helpful in their own

courses (Appendix B). Of the 92 faculty who responded to the survey, 87 (95%) were myCourses users. A series of open-ended questions were also asked of faculty regarding their experiences with myCourses.

Respondents indicated their top two favorite features within myCourses were the Grades tool (35%), used to post grades and provide feedback to students and the Content tool (34%), used to post the syllabus and other course materials for students to access online. The two most popular tips faculty would like to share with other faculty are to seek assistance and training on the myCourses system before beginning to use it on their own (29%) and to use the system regularly once they start so they maintain their skills with the system (19%). The survey also asked respondents if they have ever needed to move the course entirely online for a period of time, due to illness or other absence. Twenty percent of faculty indicated that they have had to do so in the past and used myCourses in that situation. Forty-one percent of faculty responded that they have not had this situation occur, but believe they could move their materials online if the situation was to arise.

Faculty members are significant stakeholders in the planning and implementation of Continuity of Instruction in times of emergencies, however students are largely impacted by the plans and their execution. Students can also be impacted significantly if there is a lack of planning for continuity. For example, students may not be able to complete their required course work on a pre-determined schedule, which can affect coop experiences and expected graduation dates. Ms. Teraisa Chloros, Director of Student Relations for RIT's Student Government, was interviewed as a representative of the student body to gather perspectives and opinions on the issues related to Continuity of Instruction. Ms. Chloros cited the Student Satisfaction Survey, which found that students would like to see more online classes offered. According to Ms. Chloros, Student Government has advocated for a mandatory usage of myCourses among faculty, as this provides consistency of course materials posted in one location. Ms. Chloros also suggested that in the event of a disruption of instruction, students should be able to receive some pre-determined credit for the amount of course work they have completed; students should not have to repeat the course if the quarter is not completed. In addition, grades could be awarded to students if less than two weeks of course instruction is missed. Course material could be posted online or distributed to students so that they remain responsible for reading and reviewing the course content. Finally, Continuity of Instruction plans could be connected with the emergency alert system, so that students are notified of updates from one central location and on their device of choice (cell phone, laptop, etc.).

Steven A. Nelson, Director of Access Services at RIT, expressed that developing and accommodating deaf students taught in deaf units only, would be easier to deal with in case of an emergency. Twenty to twenty-five percent of classes at RIT are integrated groups of students where deaf, hard of hearing and hearing students are being taught together. Access Services provides services ranging from real time captioning with remote capability; C-print, which is a locally grown version of captioning, to real time interpreting with remote capability and note taking services, mostly provided by well-trained fellow students.

Remote captioning could be used if for example, an epidemic disables the local captionist and access services would need to recruit a captionist working remotely. Difficulties deaf students could experience with remote captioning might be the inability to follow activities in a classroom; not seeing raised hands and not understanding dynamics in the classroom.

Other possibilities for delivering instruction in case of emergencies could be for the instructor to record a lecture, have it either real time captioned or captioned after the fact. Or, the captioning could be posted by itself in addition to the real time captioned recording. According to Dr. Watters, even though NTID is federally funded, it does not require special financial considerations during emergencies. Agreements with the government are made with both RIT and NTID's leadership, not solely with NTID's leadership.

Continuity of Instruction at Other Universities

Reviewing universities with Continuity of Instruction (COI) plans in cases of emergencies indicates that the current trend is to be prepared for emergencies of varying duration and severity. Our reviews indicate that plans are being developed especially after experiencing the severe effects and the financial impact Hurricane Katrina had on schools and communities, especially in New Orleans. Our team looked at plans developed by a number of universities of which the following were given the most attention: Fairleigh Dickinson University, University of California at Berkeley, East Carolina University (ECU*),* University of Maryland University College (UMUC), and of course RIT.

The plans at Fairleigh Dickinson, ECU, and UMUC provided comprehensive and usable information for developing recommendations for a COI plan at RIT. A number of our recommendations are based on information contained in those plans. As preparation for development of a COI plan for each college or department at RIT, it is strongly recommended that faculty and staff prepare by reading the plans referenced in this report.

Articles focusing on the financial implications of emergencies show the severe impact, which the lack of both a Business Continuity plan and a COI plan for a university can have on a community (Macklin, 2006). The effects of Hurricane Katrina on Tulane and Loyola Universities included cuts of both tenured and non-tenured faculty in addition to elimination of programs under the auspices of financial exigency (Macklin, 2006).

An issue brief by the democratic staff of the House Committee on Education raised the level of responsibility for the government in case of emergencies, including both financial responsibility and responsibility of oversight of the process of returning to normalcy (Miller, 2006).

These reports factor in the likelihood of emergencies and the levels of preparedness. Common for the Fairleigh Dickinson COI, the ECU COI and the University of Maryland (UMUC) *Classroom Interruption Planning Guide* are guidelines for students and faculty to be able to communicate in case of emergency. Also, common for the three plans are appendices with usable tools, check lists and additional resources. The plans are all step-by-step guides for use at the specific universities. The COI planning guides are general in scope, and leave specifics up to colleges and departments. Fairleigh Dickinson has a step-by-step guide for how to develop a COI plan, beginning with a communication plan. This plan includes collecting and backing up contact information for students, faculty, staff, and administrators; course preparation; preparing to use Webcampus; other course delivery methods; and understanding help resources. Checklists for deans, chairs and directors, and faculty are provided in the event of an emergency. The plans detail the importance of backing up material and using alternative modes of delivery (Fairleigh Dickinson, Continuity of Instruction, 2010).

East Carolina University (ECU) approached the development of a COI by preparing for two emergency scenarios. In one case, there is available access to the Internet (Just-In-Time). In the other case, there is no access to the Internet (Just-In-Case). ECU's COI plan features multiple examples of delivery of instruction and considerations at each level of planning (ECU, 2009).

University of Maryland University College's COI plan considers what occurs before, during and after an unplanned interruption. The UMUC classroom interruption-planning guide provides specific guidance for faculty teaching in classrooms and teaching online classes, in the event of physical and technological

disruptions. The guide also states that the University's withdrawal and refund policy should be clearly stated and communicated with students within the classroom. Faculty are encouraged to explore additional technologies that can be used for classroom communications and Continuity of Instruction. These include alternative audio and conferencing technologies, alternative email accounts in addition to University email accounts, instant messaging, chat and technologies such as Skype and Google Talk (UMUC, 2008).

RIT currently does not have a comprehensive COI plan in place. RIT does have the *Quick Start Guide Preparing a Continuation of Instruction Plan*, which recommends the use of myCourses. However comprehensive the plans referenced are, they are particular to the universities they are developed for and should be used as models for developing unique Continuity of Instruction plans for RIT.

Benefits of Continuity of Instruction Planning

Benefits for Students

- Provides consistency and stability of learning for students.
- Ensures that a higher rate of students are kept on track for graduation, even in the event an emergency may interrupt the normal academic schedule.

Benefits for Faculty & Staff

- Being prepared would allow faculty to remain on track for delivering courses and not worry about making up course material.
- Minimizing concerns regarding layoffs.
- Contributes to faculty control over curriculum.
- Increases faculty engagement in high-level administrative decision-making processes.

Benefits for the University

- Reduces financial impact for the University, not limited to reducing tuition refunds.
- Maintains RIT's reputation with parents, prospective students, regional colleges, peer institutions, the Rochester Community, and RIT industry and professional partners in the University's ability to manage a catastrophe.
- Increases communications and ongoing collaboration across colleges and among relevant stakeholders.
- Improves campus operations by fixing identified risks (fix pipes, update data systems, etc.).
- Promotes better understanding and identification of the risks we face.
- Reduces negative economic impact for the local community, if RIT, a major area employer, remains operational.

Recommendations

Recommendation 1

Create a **Continuity of Instruction Coordinator** position at RIT. The Coordinator is instrumental in the development and implementation of Continuity of Instruction planning.

a. Creates a committee of individual representatives from each college.
b. Conducts audits of each college plan.
c. Runs periodic tabletop exercise.
d. Works with current business continuity coordinator.
e. Full-time staff position, reports under Provost within Academic Affairs area.
f. Essential job duties outlined in Appendix C.

Recommendation 2

Every course at RIT needs to use the **Content & Grades tools within myCourses** at minimum, to ensure consistency for faculty and students, as myCourses would be the only centrally supported system for course delivery during an emergency.

a. The Wallace Center is responsible to offer initial training, including the ramp up for training initiative and a review of staff resources/funding needed.
b. On-going support necessary for faculty to be able to use myCourses.
c. Skills to use myCourses part of annual performance appraisals for faculty.
d. ITS should review the priority of system restoration process, with myCourses being at top of the list because of university-wide dependence in an emergency.

Recommendation 3

Every Course/Department needs to create a **Course/Department Continuity of Instruction Plan**. Faculty are ultimately responsible for the creation and implementation of continuity planning in each of their own course offerings.

a. Department chairs are responsible for approval of faculty created plans.
b. Every department chair must have an audit plan for Continuity of Instruction plans.
c. Continuity of Instruction plan minimum standards followed; provided in Course/Department Continuity Planning Guide (Appendix D).

Recommendation 4

Every College needs a **College/University Continuity of Instruction Plan**. President, Provost, Vice Presidents and Deans are responsible for the preparation and activation of College/University level Continuity of Instruction Plans in the event of an emergency.

a. Deans are responsible for approval of college level plans.
b. Arrangements regarding facilities and technological infrastructure needed by each college.
c. Continuity of Instruction plan minimum standards followed; provided in College/University Continuity Planning Guide (Appendix E).

Recommendation 5

A **Communication Delivery Plan** needs to be created to effectively and consistently communicate with students. The RIT Alert system should be leveraged to communicate with students regarding instructions on how to proceed with courses during an emergency.

a. Connection with emergency alert system for course continuity instruction plan distribution to students to leverage communication methods such as email, phone, etc.
b. Website for Continuity of Instruction at RIT - consistent message to all of campus on what is required.

Recommendation 6

Continuity of Instruction plans should be created in tandem with **change to semester calendar system**. The transition provides an opportunity for the development and incorporation of Continuity of Instruction plans into the redesign of courses based on the semester calendar.

a. Deadline the same, completed by 2013.
b. Process begins now to get to that deadline, part of course revision processes would be to create continuity plan with each course.

References

East Carolina University. 2009. *Continuity of Instruction: During a Catastrophic Event.* Retrieved April 6, 2010, from http://www.ecu.edu/cs-acad/eai/continuity.cfm

Fairleigh Dickinson University. *Faculty Quick Start Guide: Preparing to Continue Instruction during an Emergency.* Retrieved March 15, 2010, from http://fdu-coursecontinuity.wikispaces.com/

Macklin, Janet. 2006. *Local Universities Post-Katrina.* http://www.tulanelink.com/tulanelink/postkatrinaschools_box.htm

Miller, George. 2006. *Schools after Katrina: A Look at New Orleans Area Schools and Colleges One Year Later.* An Issue Brief Prepared by the Democratic Staff of the House Committee on Education and the Workforce. http://georgemiller.house.gov/pdfs/Katrina_Education_FINAL.pdf

Seidler, Margaret. 2009. *Power Surge: A Conduit for Enlightened Leadership.* HRD Press. Amherst, MA.

Rochester Institute of Technology. 2009. *The Comprehensive Business Continuity Program.* Retrieved April 6, 2010, from http://finweb.rit.edu/buscont/

Rochester Institute of Technology. 2010. *Faculty Quick Start Guide: Preparing a Continuity of Instruction Plan*. Retrieved April 6, 2010, from http://wallacecenter.rit.edu/content/teaching.php

Sloan-C Academic Continuity. Retrieved April 6, 2010, from http://www.academiccontinuity.org/home

University of California, Berkeley. 2008. *Continuity Planning.* http://ocp.berkeley.edu/

University of Maryland University College. 2008. *Classroom Interruption Planning Guide: For Managing Unplanned Classroom Closings.* Retrieved April 6, 2010, from http://www.umuc.edu/faculty/interruptionguide.shtml

Appendix

Appendix A – Emerging Leaders Team Project Charge

R·I·T

EMERGING LEADERS PROGRAM 2009-2010

Team 5
CONTINUITY OF INSTRUCTION
PROBLEM / NEED STATEMENT
Vice President/Mentor: Dr. Jeremy Haefner

PROBLEM/NEED STATEMENT:
1. Many different kinds of events can interrupt instruction. Short or extended illness, campus closures due to weather or man-made events, electrical or computer network outages, and other unanticipated situations can all bring instruction and learning to a halt.

2. What can RIT do in general and what can instructors in particular do to maintain continuity of instruction in the face of an interruption? What steps do faculty members need to take? How do we inform students? What policies should be in place?

PROJECT SCOPE:
The scope of the project will include a review of RIT's current plan for continuity of instruction and going forward, the team will offer recommendations to strengthen RIT's response to potential short and long term interruptions.

Specifically, the scope of the project will focus on the loss of three major categories and their impact on the continuity of instruction at RIT; loss of people, loss of technology, and the loss of facilities. The focus will not be on the specific event that results in the loss of any one of these categories or the emergency preparedness plans that may respond to these events.

This project will address lack of continuity in instruction for events that are one week or greater. Therefore, we exclude events that have an impact less than one weeks, as we expect that instruction can be resumed or maintained within the domain of the individual faculty member or college. Continuity of instruction plans will be created for events that last between one to two weeks, three to five weeks, along with events that last longer than five weeks since the recommendations in each of these situations may vary.

The continuity of instruction plans generated as a result of this project will offer recommendations at two levels. The first level, the individual and departmental level, will be created, implemented, and monitored by faculty members and department chairs. The second level, the college and university level, will be created, implemented, and monitored by deans and senior university administration. These plans are not meant to be implemented exclusively, but are complimentary and mutually reinforcing.

PROJECT DELIVERABLES:
At the completion of this project, the team will produce:
1. An overview of RIT's current plans to maintain continuity of instruction.

2. Recommendations for changes to the current plans and/or creation of a new continuity of instruction and communication plan.
3. A reflection of how you applied the leadership ideas and concepts taught in the program to solving this problem and working in a team.

APPROACH:

1) Data and information can be collected from various sources:

a. Review RIT's current plans continuity plans around flu (one instance that causes a disruption of instruction)
http://www.rit.edu/news/misc/swine_flu/faculty_info_provost_contingency_planning.html

b. Identify and interview a selection of stakeholders to identify underlying issues and possible solutions to this problem.

c. Review plans at other universities such as those for Farleigh Dickinson University (http://fdu-coursecontinuity.wikispaces.com/). A Google search of the phrase "continuity of instruction" will bring up many other schools' plans. Consider interviewing officials at other colleges about this issue at their campus.

d. Conduct secondary research in trade publications such as Chronicle of Higher Education, University Business, Inside Higher Ed and other news sources. Utilize free information on news websites and library databases.

Appendix B – IETC Survey Results

IETC myCourses Survey Results

Executive Summary

The majority of faculty preferred the administrative features of myCourses best (Grades - 35%, Content – 34%, and Dropbox – 16%). The collaborative features ranked next with Email at 19% and Discussions at 10%. The Assessment category had the least amount of votes with Quizzes at 10%. All major features of myCourses are shown below (Fig. A).

- 95% of respondents currently use or have used myCourses in the past
- 78% of respondents were either tenured or tenure track
- 63% of respondents have worked at RIT for 10 years or less
- 62% of respondents felt they could move their course entirely online for a period of time due to an extended illness or other absence
- 61% of respondents were from College of Science, Liberal Arts, or Engineering

Although the Grades and Content features of myCourses were considered the most popular features, they were also cited as being the most frustrating. The common theme in the comments was that most aspects of the myCourses system are not intuitive. Routine tasks either take too many steps or do not offer the desired functionality. However, many faculty acknowledged that they seldom have time to attend training or read the documentation. In fact, the number one tip from faculty was to seek assistance and attend training sessions.

In response, The Wallace Center offers multiple methods for faculty to get help and quick answers on myCourses

- Documentation, Tutorials, and Best Practices - http://online.rit.edu/faculty/support/
- Workshops, Webinars, and Archived Recordings - http://wallacecenter.rit.edu/events/webinars/
- Live Support - http://online.rit.edu/contact/
- Customized Individual Training - http://wallacecenter.rit.edu/events/register/1on1.cfm

Fig. A) Favorite Feature (n=94)

Communication/Collaboration		
Email/Classlist	18	19%
Discussions	9	10%
News	5	5%
Groups	4	4%
Blog	0	0%
Course Management		
Grades	33	35%
Content	32	34%
Dropbox	15	16%
Calendar	3	3%
Assessment		
Quizzes	9	10%
User Progress and Attendance	1	1%
Surveys	0	0%
Self-Assessments	0	0%
Competencies and Rubrics	0	0%
Intelligent Agents	0	0%

Fig. B) Most Frustrating Feature (n=86)

Grades	21	24%
Content	19	22%
Dropbox	4	4%
Quizzes	3	3%
All others	<2	<2%

Fig. C) Most Frustrating Aspect (n=86)

Not Intuitive	36	42%
Too many steps/clicks	18	21%
Lack of Particular Feature	18	21%
Performance	2	2%
All others	<1	<1%

Fig. D) Most Popular Tip (n=68)

Seek Assistance/Training	20	29%
Use myCourses Regularly	13	19%
Master basic features first	9	13%
Customize your course	2	3%
Copy from existing courses	2	3%
All others	<1	<1%

Appendix C – Continuity of Instruction Coordinator Essential Job Duties

The Continuity of Instruction Coordinator

Responsible for the oversight of the RIT COI plan as applied to the academic concerns of RIT. This position would report up through the Academic Affairs Office of the Provost. The COI Coordinator manages the development, implementation, testing and maintenance of the COI plans for each RIT college. This position would work closely with the GRMS Business Continuity Director in establishing best practices for the University.

Essential Job Duties:

Primary responsibilities include the following:

Plan Development:

- Conduct threat/risk assessments for operations of the Academic Affairs of the University.
- Identify critical academic processes of the University and various Colleges.
- Direct and assist in the development of continuity plans and procedures for all critical academic processes.
- Works with the Chief Information Officer (CIO) and Information Technology (IT) professionals to ensure the development of COI plans, recovery strategies, and off-site storage of critical information.
- Works with the various governance groups to insure that the COI plan is adaptable to changes necessary.
- Works with all areas of academic planning and training (The Wallace Center, FYE) to insure inclusion in plans.

Change Management:

- Assess the COI implications of proposed technological or organizational changes, to include: construction and occupancy of new building/facilities, transition to new enterprise management software and hardware, internal transfer of operational responsibilities.
- Coordinate revisions to existing academic Continuity of Instruction plans to avoid conflict with other COI plans. This is most critical for interdependent processes involving separate colleges.

Administration:

- Coordinate routine updates to the detailed information supporting the COI plans (e.g., contact data, team organization, personnel assignments, hardware and software specifications, network diagrams, vital records inventory lists, off-site backup schedules, vendor contracts, etc.).
- Conduct audits at the College and departmental level to assess preparedness.
- Coordinate electronic access to, and hard copy distribution of, COI plans and procedures.
- Assists Colleges in developing COI plans as part of the requirement for all new proposed courses.
- Assist Colleges and departments with resolving issues related to work area recovery planning and recovery plan development/improvement.
- Maintain the COI Plan web site.

Training and Exercise:

- Ensure that personnel with specific COI responsibilities are adequately trained to fulfill those responsibilities.
- Conduct table-top exercises in conjunction with the BCP team to insure that planning is adequate and proper testing of the systems has been performed. This would involve information gathering and vulnerability analysis of man-made and natural hazards

Emergency Management:

- Work collaboratively with the BCP Director to develop an Emergency Response Plan for the University that:
    - Establishes responsibilities for COI.
    - Provides for a centralized task force to manage emergency situations.
    - Provides appropriate liaison with external Incident Commanders.

Communication:

- Establish strong and effective communication channels with all campus constituencies including, but not limited to:
    - Employees responsible for development, maintenance, and/or implementation of COI plans.
    - Vendors who will provide services and supplies required in plan implementation.
    - University executive leadership.
- Develops and oversees the implementation of programs to educate and raise awareness for University faculty, staff and students on COI issues, guidelines, and procedures.
- Develops programs to encourage academics department compliance with COI plans.
- Provides presentations and reports to Senior Management on initiatives and/or projects.

Emergency Response:

- Provide 24/7 on-call support for any emergency which may require activation of all or part of the University's COI plan.
- Maintains a high level of awareness of COI Management and Business Continuity and related technologies, standards, processes and procedures.

Appendix D – Course/Department Continuity Planning Guide

Course/Department Continuity Planning Guide

THINGS TO PREPARE BEFORE AN EMERGENCY

- ☐ Make sure you are up to date on the basic skills required to use RIT's course management system, myCourses. Basic tools within myCourses are covered in the Getting Started with myCourses training sessions offered by The Wallace Center (http://wallacecenter.rit.edu/events).
- ☐ Keep a hard copy of important contacts (names, email, phone numbers) in your department and across the University, including:
  - RIT hotline (for closing information): (585) 475-7075 / 7076 TTY
  - RIT Public Safety (585) 475-3333 (V/TTY)
  - The Wallace Center – http://wallacecenter.rit.edu
  - Information Technology Services - helpdesk@rit.edu or 585-475-4357 (v) 585-475-2810 (tty)

THINGS TO PREPARE FOR EACH CLASS YOU TEACH

- ☐ Add the following short paragraph to each course syllabus –
  "In the event of a disruption to the normal class schedule or planned activities for this course, the format of this course may be modified to enable completion of the course through other means, including other locations, online work, etc. If this occurs, you will be provided with an addendum to the syllabus including full instructions. Please make sure your contact information is accurate in RIT's emergency alert system (http://emergency.rit.edu) to make sure you receive all necessary communications."
- ☐ Have a hard copy of your class list including names and email addresses. (Test this list to make sure all students are receiving your emails. Many students have their email forwarded to another location).
- ☐ Have a backup copy of all class materials.
- ☐ Make contact with another instructor who is willing to act as a backup in the event that you are not available to teach the course for a short time-period.
- ☐ Identify other course sections (blended or online sections especially) that may be able to merge with your course if there is an issue with either course during the quarter.
- ☐ Make use of myCourses for the syllabus information and grades feedback to students at minimum. Be prepared to post more information to the system if needed to communicate with students.
- ☐ Make sure your syllabus contains enough information for each week or unit such that students could continue on their own for a short period of self-study if needed.
- ☐ Identify and make partnerships with possible locations where your classes could be held if you needed to find another location in an emergency. These may be in the local Rochester area where similar equipment and accommodations are available.
- ☐ Make sure your department chair approves your full continuity plan for the course prior to the start of the quarter.
- ☐ Inform your students that they need to have a hard copy of the syllabus available to them at all times.

Special Situations: What if an interruption occurs during final exam week? Here are a few alternatives you may consider if there was an interruption during this important week in the quarter:

- Offering an alternative exam or activity that can be completed and submitted electronically.
- Offering affected students an incomplete and then work with students to schedule a make-up exam or activity when the next quarter resumes.
- Base the final grades for the course on work completed up to the exam.

Appendix E – College/University Continuity Planning Guide

College/University Continuity Planning Guide

Planning for Continuity of Instruction in case of emergencies has to occur at multiple levels in an organization. Instructors need to have plans in place. Department directors, department chairs, and deans need to have interdependent coordinated plans in place for emergencies of varying durations and severity.

The recommendations below are based on plans developed at Fairleigh Dickinson and East Carolina University.

At RIT, a Continuity of Instruction Plan of action could include the following:

PRESIDENT, PROVOST AND VICE PRESIDENT LEVEL:

- Develop guidelines for when to close the University in case of an emergency.
- Develop guidelines for grading policies in case of an emergency.
- Develop guidelines for adjusting calendars if classes get canceled for a period of time.
- Develop guidelines for a refund policy in case of an emergency.

DEANS LEVEL:

- Deans meet with Department Chairs and Directors to make sure knowledge about RIT's COI plan is well known and that all involved parties know what is expected of them in regards to maintenance of minimum requirements for course quality, grading policies.
- Deans create partnerships with regional colleges/organizations where classes can be held for longer periods of time.

DEANS, CHAIRS AND DIRECTORS LEVEL:

- Deans, Chairs and Directors meet with instructors/faculty of departments to outline guidelines for COI plans for each course in the department.
- Deans, Chairs and Directors meet to decide which courses need alternate locations to continue instruction and ensure other locations for course implementation are available if needed, if courses cannot be delivered electronically.
- Deans, Chairs and Directors make sure all contact information for instructional faculty and for all staff members is available both in electronic form an in paper version and that the information is backed up.
- Deans, Chairs and Directors maintain a list of people who have submitted resumes to the institute expressing interest in teaching in the department as well as graduate assistants and teaching assistants.

CHAIRS AND DIRECTORS LEVEL:

- Chairs and Directors set up emergency communication policies where departments send out emails to faculty and staff who then report back to the chair. Chairs should report availability of individuals to the Dean.
- Chairs and Directors facilitate setting up alternative ways of contacting faculty/staff – through texting and telephone messages.
- Chairs and Directors collect both a paper copy and an electronic copy of the COI plan from all instructors in the department and store them in an on campus and off campus location.
- Chairs and Directors ensure availability of training in use of alternative delivery methods, especially myCourses, is available for all instructional personnel.
- Chairs and Directors give an overview of options for merging classes with similar content.