The aim of the Journal of Asynchronous Learning Networks is to describe original work in asynchronous learning networks (ALN), including experimental results. Our mission is to provide practitioners in online education with knowledge about the very best research in online learning. Papers emphasizing results, backed by data are the norm. Occasionally, papers reviewing broad areas are published, including critical reviews of thematic areas. Entire issues are published from time-to-time around single topic or disciplinary areas. The Journal adheres to traditional standards of review and authors are encouraged to provide quantitative data. The original objective of the Journal was to establish ALN as a field by publishing articles from authoritative and reliable sources. The Journal is now a major resource for knowledge about online learning.

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The purpose of the Sloan Consortium (Sloan-C) is to help learning organizations continually improve the quality, scale, and breadth of their online programs according to their own distinctive missions, so that education will become a part of everyday life, accessible and affordable for anyone, anywhere, at any time, in a wide variety of disciplines.

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For more information about Olin and Babson Colleges, visit www.olin.edu and www.babson.edu.





INTRODUCTION TO THE SPECIAL ISSUE ON POLICY

Bruce Chaloux President, Sloan-C

The seeds for this JALN edition focusing on policy were planted more than four years ago. It evolved soon after Sloan-C began its annual survey and reflected concerns that policy—at the institutional, state, and federal levels—was lagging behind the growth curve in online learning. In short, the policy constructs at all levels, with some exceptions, targeted traditional on campus and classroom instruction and, to many in the ALN community, seemed at odds with the changing landscape of higher education.

In July, 2005, several of the authors met in Victoria, British Columbia at the Sloan-C Summer Research Workshop, where draft papers on several key policy issues were discussed. Post-meeting plans were to revise the series of papers on policy during the fall for publication in early 2006. The series of papers outlined and discussed several key policy challenges that were impeding, or could impede, the continued growth and development of online learning. The topics included the ongoing challenge of providing student services to remote learners and issues from tuition and pricing and financial aid to serving minority students and transnational programming.

All this changed in late August, 2005. To paraphrase Sondheim's award-winning musical, A <Not-so-> Funny Thing Happened on the Way to <this> Forum. Hurricane Katrina... and less than a month later, Hurricane Rita.

The powerful storms that ripped across the Gulf Coast of the United States, and the subsequent damage caused by levy breaks in the New Orleans, Louisiana area, changed dramatically the focus and attention of the Sloan-C community and, in some respects, all of higher education. To be sure, it changed the focus of this edition of JALN and delayed its release until the story, although still incomplete, could be better told.

Katrina caused the short-term or long-term shutdown of some 40 colleges and universities in the Gulf Coast region. Many institutions had to cease operations for a full academic term, some were out for several weeks, tens of thousands of students were displaced or, at best, had their academic activities interrupted. The storm spawned a response to the crisis from Sloan-C, and in reality the entire higher education community. In some respects, it was a coming of age for online learning, a turning point in the already significant growth and impact that Sloan-C's series of reports continues to underscore. Beyond the story of what was to be called "Sloan Semester" (a story told vividly in George Lorenzo's piece in this publication) and the overwhelming response to students impacted by the hurricanes, a new policy area emerged. Before the hurricanes, continuity of operations, or COOP, focused mainly on maintaining technical systems and operations. After the storms, and in the almost three years since those events, "academic COOP" has become part of the higher education lexicon.

So, the thrust of this publication changed and the emergence of academic COOP, emergency preparedness and how to utilize online learning to allow students to continue their educational pursuits in a crisis has taken center stage. It's still a work in progress, but we believe it has matured to the point where it's ready for JALN.

As noted earlier, the first piece by George Lorenzo—*The Sloan Semester*—captures the efforts of Sloan-C, the Alfred P. Sloan Foundation, and hundreds of colleges and universities to make available, free to students, online courses. Beyond the students served, it demonstrates both the capacity and compassion of the broader community. It also underscores the need for far greater planning in advance of the next crisis, be it a storm, earthquake, bird flu outbreak, or some other event.

The next two pieces—Jon Link's *Critical Event Preparedness and Response* from the 2006 Sloan-C Summer Research Workshop and Don Spicer's *Information Technology Services Support for Emergencies*—provide a glimpse into the progress that has been made in thinking about emergency preparedness and planning. The community of interest has grown to the point where Sloan-C has established a web site focusing on the topic (visit http://academiccontinuity.org) for more information and resources.

The remaining pieces in this edition return to more "mainline" policy issues.

Bruce Chaloux addresses the challenges of financial assistance/aid for online learners in *Overcoming the Financial Aid Barrier for E-learners*. This is becoming a greater challenge as tuition and fee costs continue to rise and more students opt to pursue studies online.

Karen Paulson discusses the challenges of costing online learning in her *Tuition/Pricing for Online Learning*. She raises several critical questions which the higher education community must address if it is to maintain it egalitarian philosophy of learning opportunities for all.

In *Student Learning and Student Services: Policy Issues* Claudine SchWeber defines the continuing challenge and importance of student services, an area that many believe has not kept pace with the growth in the quality of online course instruction.

Janet Poley outlines the challenges of minority institutions in the adoption and use of online learning in Asynchronous Learning Networks: Policy Implications for Minority Serving Institutions and for Leaders Addressing Needs of Minority Learners.

Richard Skinner tackles the growing transnational marketplace and several policy considerations spurred on by technology and online learning in *The Challenges of Transnational Online Learning*. This was written, it should be noted, while he was president of Royal Roads University in Canada, which served students online from several countries.

Finally, Positioning Online Learning as a Strategic Asset in the Thinking of University Presidents and Chancellors by Sam Pete Smith, Sam Smith, Robert Samors and Frank Mayadas brings us full circle, back to institutional leadership and the importance of online learning as a strategy, and as a fulcrum for policy change, in colleges today.

To be sure, the policy issues raised in this issue are not the full agenda of topics that can and must be addressed. We expect to comment on more policy challenges in future editions of JALN. We hope this volume will inform and incite thinking about the importance of policy as online learning continues to flourish. Indeed, we must ensure that policy does not become a barrier or deterrent to the continued expansion of learning, in all forms and modalities.

My thanks to my colleagues and the Sloan-C and JALN editorial staff for their contributions and patience in getting this special edition of JALN completed.

THE SLOAN SEMESTER

George Lorenzo
The Sloan Consortium

ABSTRACT

This paper is basically the "story" of the Sloan Semester. It is written in a journalistic/case-study style.

KEYWORDS

Sloan Semester, Hurricane Katrina

I. INTRODUCTION

The Sloan Semester was a vibrant and vitally important undertaking that required the immediate attention of a group of dedicated educators. The Alfred P. Sloan Foundation, though its sponsorship of the Sloan Consortium (Sloan-C), financed this worthwhile initiative that helped Hurricane Katrina- and Rita-affected higher education students continue with their education in an online modality, as their institutions were forced to temporarily close down for the Fall 2005 semester. A chain of educated decisions, along with the appropriate infrastructure and team of professionals, successfully moved this initiative forward in a quick and unprecedented time frame, "on the fly."

II. HOW THE SLOAN SEMESTER STARTED

A. An Unexpected Disaster

The impetus for the Sloan Semester began on Wednesday, August 31, 2005, immediately after Burks Oakley opened up the early morning online version of the *New York Times* from his home computer. Oakley had been following the news about Hurricane Katrina. He knew that two days earlier, on the 29th, the category 4 to 5 hurricane had made landfall. On the morning of the 31st, Oakley, like the rest of the nation, was shocked to find out that 75% of the city of New Orleans had already flooded, due to levee breaches [1]. He immediately sent an email to his colleague Ray Schroeder. "This is it, Ray," he wrote. "We thought it would be the bird flu (referring to an emergency online education plan they had discussed in the recent past), but it turned out to be a hurricane. We have to do something. We need to have a national response to help the students in Louisiana."

At his regular day job, Oakley is Associate Vice President for Academic Affairs for the University of Illinois, comprised of the Chicago, Springfield and Urbana-Champaign campuses. He is also on the Board of Directors for Sloan-C. Schroeder is Director of the Office of Technology-Enhanced Learning at the University of Illinois at Springfield, and he is also an active member of Sloan-C. Oakley and Schroeder were suddenly thrown into the construction of the Sloan Semester to help hurricane-affected students continue on with their higher education.

B. Earlier Precedents for Emergency Business Continuation Plans

About one year prior to the hurricane, Schroeder developed a business continuation emergency plan at the

Springfield campus to deliver online courses in the event of a disaster. Schroeder referred to the possibility of an avian bird flu pandemic, or an Illinois tornado, closing down University of Illinois institutions indefinitely. He also noted that his emergency plan was not without precedent. For example, in 2003, the University of Hong Kong, a traditional face-to-face university, had to shift quickly to distance learning solutions to keep its university community alive when the Severe Acute Respiratory Syndrome (SARS) epidemic closed it down [2].

In addition to the Springfield campus business continuation emergency plan, Schroeder put together a pre-proposal in July 2005 for a possible Sloan-C-sponsored workshop on emergency distance education, titled "Emergency ALN (Asynchronous Learning Networks): Delivering the Curriculum When the Campus Is Closed; Pre-Proposal for a National Workshop" [Appendix A]. In this pre-proposal, Schroeder wrote:

Precious little planning seems to have been put into the continuation of teaching and learning in higher education if physical campuses must be closed for a period of more than a week or two. Certainly such cases are not without precedent; earthquakes, hurricanes, and wars have taken their toll on universities over the centuries. In the 21st century we have come to learn all too well that no country, no institution is impervious to terrorism. Several campuses were seriously affected by the World Trade Center destruction. Buildings, air quality and access were all issues that impacted NYU and PACE, among others. But, perhaps it is the looming potential of bioterrorism and even the apparently naturally-evolved avian flu that poses the most ominous near-term threat to U.S. colleges and universities... We are motivated to share our experiences in developing an emergency curriculum delivery plan based on ALN technologies as a way of sharing with others what we have learned. This is a critical need that is time sensitive.

III. BUILDING A TEAM AND GETTING FUNDED

Little did Schroeder know at that time that his ideas would be shared in less than two months for the hurricane-impacted Gulf Coast region. In short, Oakley's communication on August 31 was the first step for enlisting Schroeder as a member of a rapidly forming Sloan Semester Steering Committee that was formed by Sloan-C President Frank Mayadas and chaired by Oakley. Over the next few days, other educators were enlisted into the committee, including:

Co-chair with Oakley

John Bourne, Sloan-C Executive Director; Professor of Electrical and Computer Engineering at Olin College, Professor of Technology Entrepreneurship at Babson College.

Co-members with Schroeder:

Frank Mayadas, Sloan-C, President; Sloan Foundation, Program Director

Bruce Chaloux, Sloan-C Board of Directors; Southern Regional Education Board (SREB), Director of the Electronic Campus

Staff:

Mary Larson, Southern Regional Education Board, Associate Director of the Electronic Campus

Janet Moore, Sloan-C, Chief Learning Officer

Martine Dawant, Sloan-C, Director of Technical Operations

Jeff Seaman, Sloan-C, Chief Information Officer and Survey Director

Keith Bourne, Sloan-C, Chief Operations Officer

Patti Giglio, PSG Communications

By 6:30 a.m. on August 31, Oakley was in his office in Urbana, Illinois, engaging in electronic and telephone communications with Sloan Foundation Program Director Frank Mayadas, Sloan-C Director John Bourne, SREB Electronic Campus Director Bruce Chaloux and Schroeder. This was the genesis of a much larger team of dedicated people put together to build the Sloan Semester "on the fly." The team was dispersed, working out of Georgia, Maryland, Massachusetts, Illinois, Tennessee, New York, and elsewhere across the country. They communicated with each other primarily by email, inside listservs, and through teleconferences and web conferences. They also posted information to share with each other on web pages they created in short order.

Before anything officially moved forward, funding had to be obtained through the Alfred P. Sloan Foundation. Mayadas contacted Sloan Foundation President Ralph Gomory, who took the necessary first steps to secure funding for the Sloan Semester. Mayadas also asked Oakley to draft an emergency ALN proposal, as soon as feasibly possible, which he would present to the Foundation's Executive Committee immediately. Oakley, Schroeder, Bourne and Chaloux jointly drafted this proposal and submitted it to Mayadas by noon on August 31 [Appendix B].

It was suggested that \$1 million be allocated. The proposal featured a succinct outline covering how Sloan-C, in partnership with SREB, would launch a Sloan Semester to help hurricane-impacted students remain in the educational pipeline by offering them the opportunity to take free, accelerated, fully online courses slated to start by October 10, or later, and end no later than January 6, 2006. In short:

- SREB and Sloan-C would coordinate with impacted institutions to create a list of most critically needed courses.
- Sloan-C would solicit institutions from its membership to offer these accelerated online courses.
- An online catalogue, with a search engine, listing these courses, would be created by SREB and published through a link on the Sloan-C website.
- SREB would utilize its Visiting Electronic Student Authorization (VESA) system to streamline the admissions and registration processes.

The Alfred P. Sloan Foundation would subsidize the cost of offering these courses in the form of a \$2,500 per 3-credit or equivalent section grant to each providing institution. (The structure of this per section grant was changed to \$500 for one or two Sloan Semester student enrollments per section, \$1,000 for three to five Sloan Semester student enrollments per section, \$1,500 for six to 10 Sloan Semester student enrollments per section, and \$2,500 for 11 or more Sloan Semester student enrollments per section.)

It was estimated that 400 course sections would be offered with approximately 25 students enrolled in each section for a total of 10,000 enrollments.

The proposal was created quickly to meet the immediate needs and concerns of students who were suddenly thrust into a situation where they could not take the courses they had already registered and paid for at their home institutions. Enrolling in these courses was categorized as a bridge. "The important thing that we emphasized was that this was a bridge to get students from here back to their home institutions in January," says Oakley. "It was not designed to steal students. They were not being fully matriculated someplace else. They were given guest/visitor access to take courses. This was something we put together to keep students in the pipeline during the Fall so they could still earn some credits."

It was also noted that new layers of detail would inevitably surface as the initiative progressed, which

turned out to be an accurate prediction. Many new details and challenges, which are outlined throughout this report, did, in fact, happen during the development and pre launch, at mid-stream, and during the post stages of the Sloan Semester.

"Within 48 hours we had approval from the Alfred P. Sloan Foundation executive committee to go ahead with the proposal," says Oakley. The amount allocated ended up being \$1.1 million.

IV. CONSTRUCTING A NATIONAL ONLINE HIGHER EDUCATION SYSTEM

In the meantime, staff from Sloan-C and SREB were already working full time on the building blocks needed to get the Sloan Semester organized. As early as Thursday morning, September 1, Sloan-C CIO Jeff Seaman had registered the sloansemester.org domain name, and Oakley had sent out a note to the Sloan-C listery seeking interest from possible provider institutions. "We propose to offer online courses during a Sloan Semester, which would be an eight-week term starting on October 10," Oakley wrote. "The purpose of this note is to gauge the level of interest in this proposed initiative."

About 30 minutes later, Frank Mayadas responded to Oakley's listery post, writing that "We at Sloan have a fast approval process which we will exercise with respect to the project Burks described, and this process will produce a final decision mid-week next week. I should say that all signs are that a favorable decision will come about."

Members of the steering committee continued to hold conference calls over the Labor Day weekend. Consequently, Oakley missed his pre-scheduled Labor Day golf outing.

A. Establishing Policies and Developing Online Mechanisms

Chaloux started to draft the policies and ground rules for the providing institutions to participate. "We basically took the SREB Electronic Campus model that we had a lot of experience with, doctored it up a bit, and then went out to the institutions," Chaloux says.

One of the biggest challenges was to get a catalog of available online courses organized and posted on the special sloansemester.org website that Seaman had already started to craft. The SREB Electronic Campus infrastructure was the perfect fit for the catalog-building role. In addition, SREB had strong connections with hurricane-impacted state leaders along the Gulf Coast and with high-level academic administrators at the institutions that were forced into closing down.

As noted on its website at www.electroniccampus.org:

SREB's Electronic Campus was launched in January 1998 as an electronic marketplace of online courses and programs from the South's colleges and universities . . . It is a gateway to e-learning opportunities and online services designed to meet the unique needs of adult learners wishing to start, continue, or complete their education. It provides a simpler, friendlier one-stop place for adults to learn about and understand educational opportunities, to select campuses and/or e-learning opportunities that best match their needs, and to apply online and enroll in courses or programs. In addition, the Electronic Campus is an online resource for traditional-aged students with links to planning for, exploring, and applying online to hundreds of colleges and universities.

The SREB "electronic marketplace" model became the online backbone for students to find and register for a wide variety of accelerated courses that interested them. The model entailed building a searchable directory of available fully online, regionally accredited courses along with an easy and streamlined online registration and admissions process. In that spirit, SREB's relationship with Xap Corporation helped to create a rapid online admissions and registrations system called the Visiting Electronic Student Authorization (VESA).

Xap Corporation, which provided the VESA service at no charge for the Sloan Semester, is an electronic and Internet-based information management systems provider for college-bound students. An already established SREB partner, Xap provides the back-end technology for managing the SREB Electronic Campus.

B. Who is Doing What?

With all this in place, the Steering Committee, in only a few days, and under the guidance of Chaloux and Oakley, drafted all of the rules and responsibilities for provider institutions, students, Sloan-C and SREB [Appendix C]. A condensed version of these rules and responsibilities is listed below:

1. Provider Institutions:

- Must be regionally accredited and be or become members of Sloan-C.
- Must offer course that carry regular academic credit and are recognized as degree credit.
- Sloan Semester students will not be charged tuition or fees, with the exception of required textbooks and course materials.
- Students will be cleared to register as "guest matriculant" or "transient student."
- SREB's VESA application form will establish student authorization to register for courses.*
- Must provide a convenient and easy process for the students to officially register for courses.
- Must agree to forward an official transcript to the student's home institution following submission of grades by faculty at no cost to the student.
- Must submit course information through SREB's "back office" procedures.
- May enroll native students or others not from impacted institutions in Sloan Semester courses and must apply regular admission, tuition and fees, etc for these non-impacted students.
- Must make available, without cost, all regular online resources and services to Sloan Semester students.
- Must establish an information page and link to it for Sloan Semester students to facilitate registration process.
- Must forward to Sloan-C confirmation of student registration and course completion dates.

2. Students:

- Must be matriculated for the Fall term at institutions in Alabama, Louisiana and Mississippi designated by those states as impacted institutions.
- May enroll in up to 12 credit hours and may take courses from multiple institutions.
- Are required to meet prerequisites of providing institutions.

3. Sloan-C:

- Will establish procedures for the review and approval of institutions and courses to be offered and authorize which courses will be listed in the Sloan Semester catalog.
- Will process payments to providing institutions.

4. SREB:

- Will host all courses on the Electronic Campus in a special section to be developed for the Sloan Semester. Students will be able to access the site from the Sloan Semester Site, an Electronic Campus site, and from providing institutions. (The actual SREB-manufactured catalog and registration system took time to build and did not go live until September 15.)
- Will determine, with state leadership in Alabama, Louisiana and Mississippi, what institutions should be designated as impacted.
- Will establish a procedure for verifying student eligibility.
- Will provide its back office to approved providing institutions.
- Will collect student information using VESA and will forward this information electronically or by fax to providing institutions along with the courses the students have indicated an interest in enrolling in.

5. How the Sloan Semester Will Work:

- Student will access a Sloan-C-hosted Sloan Semester website for information.
- Student will click on "Review Available Courses" and be transferred to the Sloan Semester Electronic Campus website where they will establish an account and be able to located courses.
- Student will complete VESA form, which includes their desired courses, and click on a submit button. SREB will be automatically notified of this submission, and a confirmation receipt will be automatically sent to student.
- SREB will verify VESA is complete and confirm that student is matriculated at impacted institution and forward VESA information to providing institution.
- Providing institution will establish the necessary student record from the VESA and then contact student about its registration and enrollment processes.
- Providing institution will forward confirmation of registration to Sloan-C.

C. Publishing a Website and Getting the Word Out In One Weekend

In the meantime, as noted by Sloan-C Chief Operations Officer Keith Bourne, who was an important leading team member during this initial start-up phase, "timing was critical. We needed a fairly robust website set up before the weekend ended." Seaman, along with Director of Technical Operations Martine Dawant and Keith got to work on Friday, September 2 and spent the entire Labor Day weekend collecting information and developing the sloansemester.org website. By the evening of Sunday, September 4, "after three 20-hour days and lots of coffee," says Keith, "we had the majority of the website information posted and were already taking student sign-ups."

At this point in time, the Sloan-C and SREB staffers were also constructing the necessary virtual infrastructure for communications between students, parents, provider institutions and the newly formed Sloan Semester volunteer staff.

Seaman, Dawant and Keith had their work cut out for them. Seaman explains how he began building a

website using the same design, structure and code of the Sloan-C site under a makeshift domain name until the Sloansemester.org domain was officially registered and operational (within 48 hours). "It was far faster to re-purpose existing infrastructure than to build something new," he says. "We just imported the same identical code over from the Sloan-C website and changed the content. Martine (Dawant) and I were able to build forms in a matter of days because we just re-purposed existing code as best as we could and as quickly as we could."

D. Forms, Databases and Listservs Help Drive Early Processes

Two very important online forms that went live on the new Sloan Semester website as early as September 4 were a student interest form and a provider interest form. "The objective was twofold," Seaman explains. "One was let's recruit providers and find out what they can provide and then organize some mechanism by which we can collect their contact and course offering information. Second was to find the impacted students. We had to start collecting their contact information and course requests so that we could start playing the matchmaker function."

The student interest form became the first contact point with impacted students. It was a basic form that asked for the student's name, institution, grade level, contact information (including two email addresses), and the courses they might be interested in taking. Additionally, Seaman built a special private website for providers that listed FAQs and tallies of student interest requests. Listservs were also started for the Sloan Semester staff and for potential providers. Later an academic advisors website and listserv were added to the mix. Seaman also built backend databases that aggregated the data generated from the student and provider forms to show the Sloan Semester Committee, as well as the providers, where the students were coming from, what courses they were seeking, and what the volunteer provider institutions could offer.

Oakley and Chaloux were sending Seaman and Keith content about policies and messages that needed to be conveyed to providers and students, which they edited and posted accordingly. Oakley's September 1 post to the Sloan-C listserv seeking provider institutions was already getting a significant response. By Saturday, September 3, more than 60 possible provider institutions had already expressed interest. By September 4, prior to even announcing that the Sloan Semester website was up and running, three prospective students had somehow found the site and submitted their student interest forms.

V. COMMUNICATIONS AND PROMOTIONAL PLANNING AND IMPLEMENTATION

In addition to editing all the content being published on the Sloan Semester website, Keith started the grassroots development of a public relations program to get the word out to the affected student population. Sloan-C also enlisted professional media relations strategist Patti Giglio to help with this effort. Giglio is principal of PSG Communications, LLC, a firm out of Silver Springs, Maryland that provides public relations services for the Alfred P. Sloan Foundation.

"Because the student population from the affected areas was greatly dispersed and may not have access to TV, newspapers or even the Internet, the marketing of the Sloan Semester website was a real challenge," Keith says. Late into Sunday night and during the next week, he started to get the word out about the Sloan Semester, using viral email campaign strategies; posting to web messaging boards where students might be looking for information; sending messages to students who were already signing up through the Sloan Semester website, encouraging them to contact their classmates; and mass emailing messages out to

Sloan-C's 20,000 individual members, as well as to a list of 7,000 higher education presidents and provosts.

On September 5, the first of many newspaper articles about the Sloan Semester appeared in the Springfield State Journal-Register, headlined "UIS to Offer Courses for Displaced Students." It was noted in the article lead that "in seven hours last Wednesday, Springfield's Ray Schroeder helped conceive a nationwide initiative that could salvage the semester for thousands of college students in the Hurricane Katrina-ravaged Gulf Coast. . ."

Giglio went to work on a number of very important fronts to spread the word much further and wider. She describes her role as developing and implementing

a strategic communications campaign designed to reach displaced students and their parents with messages about the opportunity being presented by Sloan Semester. The process included identifying target audiences, informal focus group research, developing key messages, training spokespeople, leveraging the PR influence of providing institutions, developing collaborative relationships and outreach efforts aligned with organizations, developing partnerships with other interested parties, and media tracking. Outreach tools and communications vehicles includes press releases; a 20+ market radio tour; personal and proactive media outreach to a targeted higher education audience, regionally-based reporters and general-assignment reporters; Internet-based based public service announcements (banner ads); and print advertising.

A. What Worked

Some of the most successful promotional efforts were accomplished through the hurricane-impacted institutions that announced the Sloan Semester to their students and provided a link to the Sloan Semester website on the front pages of their own websites or through their departmental or faculty listservs.

An extensive press release campaign and radio tour also contributed significantly to spreading the word about the Sloan Semester to the right audience. Additionally, a collaboration with the Ad Council ultimately generated the distribution of numerous public-service banner advertisements posted on its affiliated websites that drove traffic up on the Sloan Semester website. Another banner ad placed on the MTV website also worked very well.

Giglio's first press release, announcing the launch of the Sloan Semester, came out as early as September 2. The lead-in was:

The Sloan Consortium, an international association of colleges and universities committed to quality online education, is offering students displaced by Hurricane Katrina an opportunity to continue their education at no cost. In collaboration with the Southern Regional Education Board and with funding from the Alfred P. Sloan Foundation, the special accelerated program will provide a wide range of courses to serve the learning needs of students at the community college, university and graduate level, regardless of academic discipline. These courses will be given by major universities and other Sloan Consortium members. Students interested in finding out more about the program and the free courses can do so at www.SloanSemester.org.

Giglio also organized radio interviews with 22 stations, starting on September 9. Schroeder and Oakley became the primary interviewees for these broadcasts, one of which was with the ABC radio network, which has 2,000 affiliates. Giglio says that the radio broadcasts hit key segments, such as the parents and

aunts and uncles of impacted students.

Schroeder says "the media was really intrigued with the idea that colleges and universities could, in fact, come together so quickly and respond. They were also proud. As I talked to people in Texas or even New York, they were proud of particular institutions that were either geographically close to them or that they had an association with. They would ask if their alma mater was participating. There was a sense of pride knowing that nearby there were institutions participating in this kind of effort."

B. What Didn't Work

A print advertising campaign was perceived as not being as successful as any of the other promotional strategies. Near the end of September, one-third-page print advertisements were placed in more than 70 State of Louisiana community and weekly newspapers and 10 major city daily newspapers in Alabama, Louisiana, Mississippi and Texas. It is believed that the print advertising money could have been utilized more effectively. The reasoning behind taking out these ads was based on a perception that displaced students and their parents were getting news primarily through newspapers. However, when the ads ran, there was no spike in visitors to the Sloan Semester website, which Seaman had been closely monitoring right from the start of its launch.

C. Tracking Results

"The bulk of all the website traffic came from referring websites at key institutions, including not just impacted institutions," says Seaman. "For example, the state of Florida's Department of Education website put up a link for us and became a top referrer. But the bulk of all the students had come in and hit our website prior to the print ads going out." Some of the largest number of hits originated from the Delgado Community College, Xavier University, and University of New Orleans websites, which, perhaps not coincidentally, wound up having the highest number of Sloan Semester students.

"What you can also see is a spike in referrers from people who actually saw the press release and then clicked on the link (that was live inside the press release)," adds Seaman. "What you also see is people searching Google for the Sloan Semester and then coming in. Those searchers timed out to be exactly when the press releases came out."

D. Communications with Louisiana Education Leaders

Chaloux also helped with communication and promotional efforts, primarily through SREB's working relationship with the Louisiana Board of Regents and the Louisiana Community and Technical College System (LCTCS). For example, Jerry Pinsel, LCTCS vice president for Academic and Student Affairs, explains how 18,000 students from Delgado Community College were severely impacted due to that institution closing down. "Doing something electronically became extremely important. . . The Sloan Semester was a blessing." Pinsel adds that many faculty from impacted institutions had some online teaching skills, but most had no experience whatsoever teaching fully online courses. Hence, an institution such as Delgado had limited options, even after they had managed to get their elearning systems turned back on. "The other choice was the Sloan Semester had already identified schools willing to provide courses from schools with the expertise and manpower to do it. Wow! What a great resource."

Larry Tremblay, associate commissioner for Planning and Research for the Louisiana Board of Regents, also had high praise for the Sloan Semester. He explains how the Board of Regents had started an

initiative two days after the hurricane hit, called the Louisiana Higher Education Response Team (LAHERT), which dealt with protecting and helping its displaced students. "Bruce (Chaloux) came to us with the Sloan Semester idea. . . . We informed LAHERT (which was holding meetings every other day at the time) about the initiative and charged the systems to support it and get it out to their campuses as soon as possible." However, the reaction to the Sloan Semester from impacted institutions was mixed, for a variety of reasons, including a fear that students, and revenues, would be lost, even though the Sloan Semester was strictly a "bridge" offering, whereby students were encouraged to return to their home institutions in the coming Spring 2006 term. Nonetheless, there were institutions that participated, and "I think the Sloan Semester was tremendously successful in terms of the short turn around," Tremblay says. "We in higher education don't have a very good reputation for changing things quickly, but I think the Sloan Semester was a shining star in that regard."

E. Illuminating Providers

Another part of the overall communication process entailed Sloan-C organizing an Elluminate Live session for prospective providers on September 7. Elluminate is a web conferencing tool that enables groups of people to hold synchronous meetings and presentations that includes audio and video. The Sloan-C organization had a lot of experience hosting these types of web conferencing events through its Sloan-C workshop program. More than 60 representatives from prospective provider institutions attended the session, asking a myriad of questions that were fielded professionally and efficiently by Chaloux, Oakley and Schroeder. This clarification process with providers about how the overall initiative would move forward lead to the further development of a valuable Frequently Asked Questions section on the providers' website.

VI. NEXT STEPS IN THE PROCESS: COMMUNICATING WITH PROVIDERS AND STUDENTS AND PUBLISHING THE CATALOG

While all these important promotional and communication activities were churning across the country through numerous media outlets and a wide variety of electronic vehicles, two new and important team members came on board: John Sener on September 9 and Kathy Frizzell on September 12. Sener worked on communicating with provider institutions and prospective students, and Frizzell became the manager of a team of virtual advisors from around the country who volunteered to help Sloan Semester students.

In addition, it is important to stress that, during these early days (August 31 through September 15), the SREB staff was very busy with constructing a highly sophisticated web-based course catalog, registration process, and reporting system that would go live on September 15 and ultimately keep the entire Sloan Semester on track through the end of this initiative in January 2006.

A. Playing Matchmaker

Sener, who is an effective practices editor for Sloan-C and independent online learning consultant, immediately started to help Oakley with the numerous communications from providers and prospective students that were piling up in his email box and keeping him up at all hours of the night.

As a side note, Oakley jokingly says he "did not sleep for six weeks," with regard to the management responsibilities he took on over the course of the entire Sloan Semester project. Incidentally, all of the staffers from Sloan-C and SREB typically worked 12- to 16-hour days, especially during the early phases of this initiative, and nobody complained about the long hours. In fact, the opposite occurred, with

everyone saying they had a profound sense of purpose and satisfaction working on a project that they knew was helping people.

When Sener started on September 9, the Steering Committee was advised by Oakley to cease allowing new provider institutions to volunteer courses. Over 160 regionally accredited institutions were on the list ready to be officially approved. Of that list, 153 got the go-ahead by the Steering Committee to become Sloan Semester providers. Sener was busy communicating with these providers via individualized emails about what they needed to do, sending customized boiler-plate responses that had been developed by Oakley. "September 9 was a very busy day," Sener says. "I had more than 120 emails from providers on that day alone."

At this time, Sener's job, in addition to communicating with providers, quickly changed to creating a list of courses that students were requesting—as they had noted on their student interest forms—and matching these requests with the courses that the provider institutions were volunteering to offer, as noted on the provider interest forms. Sener was accessing the back-end database system that Seaman had built, which was a spreadsheet that ultimately became a course list that grew in numbers from early September up to the day courses started on October 10 through December 1. He organized this list into subject categories that were used by the Steering Committee and the provider institutions to get a clearer sense of what students wanted and what provider courses should be added to the catalog that SREB was producing.

Sener was also responding to student questions that were coming through an online form on the Sloan Semester website. These questions and answers formed the beginning stages of a sophisticated virtual academic advisors system that Seaman built (see "Advisors Play Key Role," below).

B. Providers Start Entering Course Data

The provider institutions listserv was also getting daily posts from Oakley, who was providing instructions for how providers should list their courses inside the catalog being developed by SREB, as well as detailed information and announcements concerning the progress of the entire initiative.

On September 10, it was noted that Mary Larson, SREB's associate director of the Electronic Campus (EC) was managing the Sloan Semester catalog. At the start of this process, her job was to contact a single individual at each providing institution and provide that person with login information so they could enter course data using the EC's Course Data Entry (CDE) system. Each institution was allowed to submit 10 courses for the catalog at this time. (This number eventually increased substantially at some institutions that could meet the demand for specific courses being requested by students.) Larson was also responsible for approving courses that would ultimately wind up inside the catalog, as well as approving the student application forms that would start coming in at a rapid pace. To help her with all these responsibilities, she enlisted the help of SREB personnel Associate Director of the Adult Learning Campaign Angela Birkes, EC Consultant Alice Ann Bailey, Administrative Assistant Bernitta Harris, and Administrative Assistant Ihuoma Johnson.

On September 11, Oakley wrote to the provider listserv that the list of needed courses had "greatly expanded." On September 13, he thanked institutions that were entering their course data into the CDE system, which was growing quickly. In addition, expanded resources for providers were regularly being published on the providers website, including a list of courses that were still needed, an expanded FAQ section, a PDF download of a newly created Sloan Semester Provider Manual, a press release template

that providers could use to announce their participation in the Sloan Semester (which many used), and a listing of donations and special offers being provided by various vendors, who were not affiliated or endorsed by the Sloan Semester, to hurricane-impacted students.

It was also announced that a listserv for volunteering academic advisors was just launched, as well as a listserv for financial aid personnel. "We are getting lots of questions from students about financial aid," Oakley noted. Fortunately Chaloux had a connection with the Texas Guarantee Student Loan Corporation (TSLC) through its Assistant Vice President Sam Wilson. TSLC is a public, nonprofit corporation that administers the Federal Family Education Loan Program. "I asked Sam if they could help," says Chaloux. "He asked me for a formal request. Sam passed it on to the leadership, and they provided access to their toll free number and staff and provided real-time financial aid counseling and assistance to the Sloan Semester students free of charge."

Basically all the wheels were now in motion for a September 15 online catalog launch.

C. September 15 Online Course Catalog Launch

Oakley's post to the provider institutions listserv on the morning of September 15, started out with "Greetings! We now have almost 900 courses in the Sloan Semester Catalog from 113 providing institutions. Thanks to everyone for working so diligently on this." He also urged institutions that had not yet entered the CDE system to do so ASAP. In addition, it was noted that 1,000 students had signed up through the SloanSemester.org student interest form, which was being taken down as the catalog went live later that evening. In its place was the VESA form.

On the morning of September 16, Oakley's early morning post to the provider institutions listerv announced that the live catalog had grown to 1,000 courses in its database and that students were already looking through the catalog and contacting advisors. "Thanks again for making the Sloan Semester a reality," Oakley wrote. "We went from concept to live catalog in 16 days!"

VII. HOW SREB'S ELECTRONIC CAMPUS PROCESSED SLOAN SEMESTER DATA

Meanwhile, the SREB staff was busy making sure that each and every CDE form was accurate before making each available course live inside the Sloan Semester online catalog. The process mimicked the way in which courses are approved and posted to SREB's EC catalog except everything was done at a much quicker pace. "We simply modified our current Electronic Campus form to include a field that said Sloan Semester participant," Larson says. "And they (providers) could click on that, and that became our signal that they did not have to be as detailed as we would normally require for Electronic Campus participation."

Larson further explains that one person from each provider institution was responsible for completing the CDE form that required such information as a course description; available sections; if there were any prerequisites; and what learning resources were needed to be accessed online, such as the bookstore and the library. Once the CDE form was submitted, the SREB staff reviewed all the data for accuracy and to ensure that all links to the provider's course were not dead.

As the SREB staff was diligently checking CDE forms, Larson was also working with the folks at Xap to

facilitate proper real-time activation of the online admissions and registration system that required students to fill out VESA forms that were integrated with the courses they were interested in.

"As courses were being added and activated by our staff here in the Electronic Campus office, the student, when he or she went into the online catalog, was able to select the institutions and courses they wanted to enroll in, and they were only able to see active courses that still had room in them," Larson explains. "That was a huge step forward because it meant they were enrolling in live courses instead of trying to enroll in courses that were closed."

As students completed their VESA forms, they had to be reviewed and finalized by the SREB staff before being sent to the relative provider institutions. In some instances, students, even though the VESA form was not cumbersome, were not filling out all the necessary fields. The SREB staff would then notify these students to complete their forms.

A. Processing VESAs

The next step was to handle the back-end side of the actual student approval process once the completed VESA forms were finalized. This approval process was a batch data processing action whereby the student information would first get matched with the available courses database, and then all this information would be pulled into a long spreadsheet. SREB's Director of Information Technology J.J. Kwashnak developed a form that would display the information from the spreadsheet into a more user-friendly format for the SREB staff to view and then ultimately release to the institution. This entire process was called Level 1 approval, and it ensured that students were indeed from hurricane-impacted institutions.

The provider institutions were notified through a file transfer process also set up by Kwashnak. This process entailed notifying institutions by email when students had applied for courses. Provider institution registrars would then go to a special VESA.SREB website that held each student's VESA information for the provider institutions to admit or reject. Kwashnak explains that it was important to structure the file transfer/website process in a secure way. "We were holding sensitive student information, including social security numbers and things that could be associated with identify theft, so we had to up the security issues and move from a passive email system to a web-based system," he says. Basically, providers would enter a secure password-protected website and obtain the VESA data they needed instead of having it sent to them in a manner that could possible be intercepted.

B. Building a Data Collection Reporting System

While Kwashnak was dealing with building these systems, he also was given the task of building a data collection reporting system that would give the Sloan Steering Committee real-time information regarding what courses were being filled by whom, what courses might still be needed, and which providers might be able to fulfill that need. Kwashnak says that building this reporting system was "a trial-and-error, on-the-fly kind of thing" that "grew organically as we needed things."

"He (Kwashnak) essentially became the Sloan Semester registrar," says Chaloux. In addition, "he was the key at developing a set of systems and reports that we could track in real time on what was happening. Then his responsibilities shifted again as the students started to submit changes to us (see below). He handled all of that and all of the registration processes, and he had at least 153 contacts at all the institutions he worked closely with. He got heavily involved more so than he thought he was going to,

with both student interactions and institutional interactions by telephone and by email. Finally I just got out of his way because he was doing what needed to get done and he kept everyone happy, including me."

VIII. CHALLENGES AND CHANGES

One of the problems that occurred as institutions began to process student VESAs was that some institutions did not react in a timely fashion, leaving students in a state of limbo, wondering if, in fact, they were officially registered for their course(s). For example, a number of providers waited too long for multiple VESAs to come through before getting back to students. Plus, these same providers would batch-process VESAs and respond to students via mass-email. In addition to these applications not getting processed quickly enough, spam-killer software intercepted the mass emails, so the prospective students did not even receive the proper notification when it was sent.

Larson notes that the some institutions were well prepared for an influx of student VESAs while others were not. The result of this was that students were inundating SREB and Sloan-C with emails and telephone calls, asking whether or not they were admitted. In addition, a good number of provider institutions were contacting SREB and Sloan-C with questions related to the entire process of officially accepting and enrolling students.

A. Dealing with Drop/Add/Withdraw Process

To make things even more challenging, students started to change their course requests, dropping and adding courses as new ones became available. Others decided to withdraw all together, realizing that taking a course was too much of a challenge as they coped with the immediacy of their uprooted lives. This entire drop/add/withdraw process, which became heaviest near the last week of September up through course start dates, brought about another series of responsibilities and tasks for the SREB staff. "It was something that we did not anticipate," says Larson. "It turned into a big process that had to be done manually."

B. Textbook Snafu

Another challenge arose for students when it became evident that the cost of books was not covered by the Sloan Semester. Plus, some students enrolled in courses at the last minute and were not able to get their all-important books in time for their first week of assignments, putting them behind schedule before they even started. "In retrospect, we should have done something to get books to the students," says Oakley. "When you have lost everything, \$100 for textbooks is something you may not be able to afford. For a single mother on financial aid going to Delgado Community College, \$100 for books can be a deal breaker."

C. Numbers Increase

Regardless of such challenges and concerns, many students did enroll in courses and were well prepared to move forward with their education. On September 19, Oakley wrote to the provider listserv that that online catalog listed 1,100 courses from 138 institutions. On September 20, he noted that more than 600 courses from 98 providers had been requested by students and that one course had been requested by 10 students. On September 21, Oakley wrote that 1,149 courses were in the catalog from 148 institutions. He also noted that students were increasingly responding in a positive way:

I wish I could share with you some of the email we are receiving from students who have been impacted by Katrina. The students describe some really difficult circumstances, and they state that the opportunity to remain in college this Fall through the Sloan Semester means a great deal to them. It is really giving them hope for getting their lives back to normal. So thanks again to all of you for providing this educational opportunity to so many people.

IX. ADVISORS PLAY KEY ROLE

While all these catalog and registration processes were occurring, a team of student advisors had been organized and working under the management of Kathy Frizzell, who came on board on September 12. The story of how Frizzell became involved is interesting to note.

Frizzell is a recently retired (as of June 2005) academic counselor who had worked at Parkland Community College in Champaign, IL for 16 years. In early September, she read an article in her local newspaper about the Sloan Semester. Given her experience, and her relative freedom as a recent retiree, she thought that, maybe, she could help out in some way, so she called Oakley (whom she knew as a personal friend and colleague) and scheduled a meeting with him. Oakley hired her on the spot to coordinate the entire academic advising portion of the Sloan Semester. Frizzell, however, was very hesitant at first to take on such a role, because, as an experienced academic counselor on a traditional campus, she preferred, and was more accustomed to, providing face-to-face advising services to students. "But, I'm not an online person," she told Oakley. "Oh, don't worry about that," Oakley replied. "We can get you through that."

The short version of this story is that Frizzell had never provided online advising services before, and she was not very experienced with online technologies, in general. However, over a very short period of time, she managed to become a first-class virtual advisor who lead a team of 41 additional virtual advisors, all of whom she interacted with online. In short, she became proficient and effective with using email and listservs to communicate with students and fellow advisors, with developing content for publication on a website, and with participating in web-based conferences. Frizzell's involvement with the Sloan Semester is another testament to how online technologies can be rapidly adopted and used effectively by a relatively inexperienced user of such technologies. "An interesting thing for me about working online is that it stopped feeling virtual," says Frizzell. "At the beginning there was a lot of 'Well, how do you do that?' And then once you get over that, it is really easy. It becomes second nature. And I do think the students were well served through online advising."

A. Developing an Online System for Advisors

Frizzell jumped into creating policies and an online tutorial for a virtual advisors system that was being constructed as she and her colleagues started answering a barrage of questions that were coming from students through a "Sloan Semester student question entry form." These questions, along with the students' contact information, were automatically passed to a secure advisors website that all the volunteer Sloan Semester advisors were given individual username and password access to. The advisors would respond to these questions through another form that would generate a direct email response to the students. After responding, the original question was marked on the advisor's website as being answered.

"We were creating a system as we were using a system," says Frizzell. "We were always running one step ahead of ourselves, saying 'Well, okay, this student has asked this question, so what is our policy going to be?" Or, 'What do we need to make this happen?" So, it was flying by the seat of our pants."

Part of the advisor-system creation process included developing an effective online FAQ section for students that became an extremely important feature of the Sloan Semester website. Another challenge concerned understanding and advising students about what provider institution courses in the new online catalog were equivalent to the courses students had registered for at their home institutions. For example, "students would write in and say 'I'm in Psychology 237 at Delgado Community College.' They did not realize that other colleges from across the country don't call that course Psychology 237," says Frizzell.

The answer to solving this challenge was found through a service called CollegeSource Online, a virtual library representing more than 33,700 college catalogues, including the hurricane-impacted institutions, in full cover-to-cover, original page format. CollegeSource offered free access to Sloan Semester advisors to match the courses students were requesting with the courses being offered by the provider institutions.

"As we were figuring out things, setting policy and procedures, I was collecting all these nuggets of information and sending daily updates (to an advisors listserv), giving them that information so that they would be able to answer questions appropriately," says Frizzell.

On October 5, she posted the following to the advisors listsery:

Help! Sloan Semester students and the advising team need your help to handle the increased advising load. We have reached a critical stage as most classes are due to start next week. All the usual actions are taking place, including courses becoming full and closed and students needing immediate advising to identify alternatives; students panicking if they have not received confirmation from their requested schools and trying to needlessly add additional courses; students changing their minds about what they want to take, students waiting until the last minute to register, etc. All typical in the life of an advisor. And all leading to my request for as much time as you can devote to handling student questions and course requests over the next few days, specifically through Monday, October 10.

Also on this same listsery post, Frizzell noted a student's heart-felt message upon learning, through an email message, of her eligibility to take courses through the Sloan Semester:

Oh, my gosh.! This is just the most wonderful email message I have opened in a long, long time. Yes, we all do what we can to make a positive difference, and I'll be very sure that all who had anything to do with making that difference for me know of my ongoing appreciation now and as the relief effort goes on. I'll be keeping you all in my prayers - of that you can be sure. Be blessed, for you surely deserve it, all of you, and not just for helping me, but for all the good you are doing for so many. Your generosity is very humbling. Thanks too for the 'good luck' for my studies. It's my fondest hope that I'll do well.

X. OVERWHELMING EXPERIENCES

One week prior to October 10, new VESAs, and changes to old VESAs, were arriving by the minute. Oakley wrote on the provider's listserv that "students were being students, forwarding last-minute changes in courses and adding or dropping courses." So, the week leading up to October 10 was a very busy one for all parties involved with the Sloan Semester. "We had developed a whole set of systems to support this effort, and it was all consuming," says Chaloux. "We were involved from the first thing in the morning, and there were emails and phone calls being exchanged at 11 or 12 at night. At the same time, it was heart warming because you knew you were reaching out to students. We threw a lifeline out to them,

and it was a way to create some normalcy in their lives that had become very abnormal because of the hurricanes."

"If you ever felt like you were overworked or feeling sorry for yourself, you just had to talk to a student," says Larson. "They had nothing. They were trying to figure out how they could keep their Internet service up and running. Some had gone from living in a dorm to suddenly living back at home with their families with all their siblings, trying to concentrate and take courses. Some were working two jobs, trying to get enough money to recreate their living space and still go to school.

"It was rewarding in that students were grateful, and they said so," she continues. "They thought the Sloan Semester was great. They really appreciated people taking out time to make this work and help them through this term."

XI. STATS AND FACTS

About 60% of all the Sloan Semester courses started on October 10. The remaining courses started sometime between October 10 and December 12, with most remaining courses starting on October 17.

The overall big picture of the Sloan Semester was ultimately detailed through the following statistics that were generated through Kwashnak's reporting system:

- 153 institutions offered a total of 1,345 fully online courses. 800 courses offered by 135 institutions from 36 states wound up enrolling Sloan Semester students.
- 4,114 seats were requested by students.
- 1,736 students applied to the Sloan Semester and 1,587 were admitted.
- Some of the courses enrolled only Sloan Semester students, and other courses enrolled a mix of Sloan Semester students with the institution's native students.
- 5,245 seats inside the Sloan Semester courses were filled by native students.
- More than 75% of Sloan Semester students were female, and 49.5% were African American.
- 26.3% of Sloan Semester students came from Xavier University, 24.6% came from Delgado Community College, 9.4% came from Loyola University, and 7.9% came from the University of New Orleans. The remaining Sloan Semester students were spread across 26 hurricane-impacted campuses.
- The top five institutions registering Sloan Semester students were Massachusetts Colleges Online, Community College of Denver, Northwestern State University, San Jacinto College, and Tulsa Community College.
- 158 seats were denied because students did not meet requirements or deadlines. 81 seats were denied because the course was cancelled. 312 seats were dropped because the student failed to communicate. 962 seats were withdrawn by the student.

XII. WORDS FROM FACULTY AND STAFF FROM PROVIDER INSTITUTIONS

What follows is a synthesis of faculty and staff, from three of the larger course providers, talking about their experiences managing the Sloan Semester at their institutions, along with their interactions with

colleagues and students.

A. Massachusetts Colleges Online

Suzan Kinaci is director of technology and administrative services for Massachusetts Colleges Online (MCO), a consortium of 15 community colleges and 9 state colleges in Massachusetts that offer online courses and programs. Thirteen MCO institutions participated in the Sloan Semester.

MCO institutions filled 152 seats in 51 courses and, combined, was the largest Sloan Semester provider. The courses that received the most enrollments were Human Sexuality, Introduction to Philosophy, and Introduction to Sociology.

"We tapped into our existing network and notified everyone that we had been invited to participate in the Sloan Semester," Kinaci says, adding that she established communications with liaisons from each of the 13 participating institutions. She also developed an efficient system for passing on student VESA information to everyone in a timely manner. "As registrations came in, I sent them back to the liaisons, and they took it from there," she says. "I think everyone found it to be a really great activity, although no one anticipated how much time it was actually going to take.

"It was a good experience all around," she continues. "When there's a will, this whole extremely slow-moving mechanism called Academia can move pretty fast to do things that are out of the norm."

1. Philosophy Out of Disaster

James Gustafson was a faculty member from MCO's Northern Essex Community College who taught an Introduction to Philosophy course that he compressed from a 16-week course to an 8-week course for the Sloan Semester. He had 12 Sloan Semester students, and "a couple" dropped out "for reasons I am not sure of," he says. Overall, the students "did remarkably well - some of them outstanding."

Gustafson adds that he found the Sloan Semester students' discussion forum posts to be "somewhat different from my other students. For example, when we discussed the meaning of life, especially in the face of suffering, several mentioned the hardships of having their lives (and their families' lives) torn apart by the Katrina disaster. . .

"In all this, none of them rejected their belief in God, even though it had shaken them. Their explanations? Tragedy often brings out the best in people and challenges us to become better people. It may be a kind of test of the depth of our virtue. . .

"It is hard for me to imagine what some of them are coping with, having nothing left except the clothes on their backs and what little they could take with them when the waters rose to devastate everything in their environment. I have great respect for each and every one of them, and for those who are pitching in to make their lives a little better.

"I think these tragedies bring out some of the better virtues that are lurking deep in our hearts, and we want to do something to help people who have suffered a blow, to move forward in their lives and recover from it. So, I was personally very satisfied to be invited to take part in the Sloan Semester."

B. Community College of Denver

Jeanne Stroh is director of Online Learning for the Community College of Denver (CCD), which filled 133 seats with Sloan Semester students in 11 courses, the second highest of all the providers. Stroh explains how the Sloan Semester became a very labor-intensive process for the CCD online learning support staff because every student VESA had to be processed manually into the CCD student information system. Plus, the back-and-forth communications with students, as well as with other units within the CCD system, got to be a somewhat cumbersome process. "I was sending emails to students and keeping lists updated," she says. "I started checking off 'did I send the letter, did I hear back from them, are they registered?' And I had to follow up and make sure that the college did not charge them tuition because the college automatically bills them."

She adds that if students said they had the appropriate prerequisites for a Sloan Semester course, their word was enough for acceptance, because, due to the devastation occurring at their home institutions, there was no access to official transcripts. This created registration conflicts that had to be resolved through repeated communications that required some "convincing" on Sroh's part.

Some of her interactions with students are also interesting to note. She advised one student, for instance, who had never taken an online course in her life, to enroll in one course instead of four courses that she was planning to take. "She called me at one point when she had gone back to New Orleans and said 'thank you for talking me out of taking all those classes.' She had children, a husband and other family members in New Orleans, and she said 'I had no idea what I would be coming back to, and there was no way' (she could have completed four 8-week, compressed online courses)."

1. Stablein's Sociology Course

Sally Stablein taught a Sociology 101 course at CCD that had 14 Sloan Semester students. Unlike many of the Sloan Semester courses, all students in this particular course completed it. There were no drop outs or withdrawals, and 13 earned a grade of A. "They all went above and beyond; they were all spectacular," Stablein says.

About one half of these students had lost their homes and had to make arrangements to get adequate Internet access, with friends, relatives, employers, the local library etc. "I had a group of students who were very grateful for what they had at the time," she adds. "That is one of the things that was so shocking and surprising to me. I thought that by taking this course I would perhaps be dealing with issues because of their circumstances and the things they had gone through. But whatever issues they may have had did not affect the class. I almost think that the class was like an outlet for them."

Stablein explains that the course was accelerated and required a good deal of reading, writing, a final paper, a final exam, and regularly scheduled discussion forums based on chapter readings where students had to "go above and beyond simply discussing an issue." She claims that her experience working with Sloan Semester students online "was one of the most positive I had. I actually had to keep up with them."

C. Tulsa Community College

Tulsa Community College (TCC) filled 77 seats in 12 courses and was the fifth largest Sloan Semester provider. Randy Dominguez, dean of Distance Learning at TCC, explains that building the infrastructure

to accommodate Sloan Semester students was similar to how the Distance Learning Department had contracted to offer corporate-training courses in the past. "We did not just move these students into existing courses. We created new course sections, and then the question became how do we track these students when, in essence, we were not really enrolling them as TCC students."

Carroll Jones, Distance Learning registrar at TCC, says that he had to create a system whereby no tuition charges and a different matriculation status would be applied to the Sloan Semester courses. He evaluated each VESA that came in and manually admitted students accordingly. "It was a matter of treating them like a student walking into our school and starting the application process. I had to go through an application for each student and load that into our system." Students were then contacted and provided online instructions on how to use the TCC Blackboard course management system, as well as passed on to the instructor of the course they were enrolled in for future communications.

Jones explains that some students never followed through. "In the very beginning it was hard to get in touch with them, but as the semester went on, it became easier, given that more productivity was taking place in the devastated areas. However, even by cell phone, there were a lot of students who could not be reached." Some students simply could not get the computer and Internet access they needed to take courses they had actually signed up for. Due to such extenuating circumstances, many of these students simply could not, or did not, contact TCC.

1. Dewayne Dickens' African American Literature Course

An example of this inability for students to follow through on their commitment to take a Sloan Semester course, which is understandable considering what they were dealing with in their uprooted lives, can be found in a TCC sophomore-level African American Literature course taught by Dewayne Dickens.

Ten students enrolled in this course, but only one actually finished the work required for a passing grade. "The discussions for the first few units were good," says Dickens. But as the course requirements started leaning toward more intense reading of the textbook and posting more significant responses to the discussion board, "the conversations started dwindling." Dickens then contacted students individually by phone or email, trying to help them in any way he could. "What they were telling me was that this was their first online course. They were not sure of how to find things online or how they were supposed to respond." In addition, some did not have the textbook. Others were returning back to Louisiana, dealing with insurance claims and trying to salvage belongings, or having difficulties with getting access to a computer. "You could tell that taking the Sloan Semester course was their one potential for working on their education," he explains. "But it was not ideal for them because they would have never chosen an online course if they had a choice between a face-to-face class or online. However, this was what they were being offered, what was being paid for. It was a wonderful opportunity, but unfortunately their learning preference did not fit into this mode of learning."

Dickens tried a number of strategies to keep these students engaged. At close to mid-point in the course, he changed the discussion board requirements and basically converted the course into a self-paced format whereby they had to read the textbook and write three papers within a variety of options. Plus, he provided deadlines that he thought the students could handle. Still, only one student completed the course. The remaining had to be withdrawn from the course so they would not receive failing grades.

"A crisis creates a certain situation, but also there is the reality that sometimes you just can't fix some things," says Dickens. "The students had the opportunity, and they realized that people were trying to

assist them, and I know that they learned something, even if they did not finish. There is always something learned."

XIII. WORDS FROM THREE SLOAN SEMESTER STUDENTS

Dickens' comments sets the stage for three uniquely different and brief stories that help paint a picture of what many hurricane-impacted students experienced and learned during the Sloan Semester.

A. Christine Montez Stack

Montez Stack was indirectly affected by Katrina because she was in Denver when it hit, where she lives, works, and is a member of the Colorado National Guard. The Sloan Semester was also made available to all National Guard students who were deployed to the Gulf Coast region to help with relief efforts. Montez Stack was registered in three courses at the Community College of Denver (CCD) that she had to drop out of when she was called up for hurricane-relief duty. One course, in particular, in microbiology, was very important to her because it was a required course that would get her accepted into a registered nurse program. "This was my last semester to get it done," she says. "But when the hurricane hit, I felt that was a priority, and if that meant I could not start my RN program for another year, it was just the way it was going to have to be. I felt very strongly that this was something I needed to do."

Montez Stack is 32, married, with a teenage daughter. She serves in the 140th Service Flight at the Buckley Air National Guard Base in Colorado as an education and training manager. On September 2, she was on a plane to be stationed at the Combat Readiness Training Center in Gulfport, Mississippi. Before departing, she dropped out of three classes she was registered for at CCD.

"When we touched ground, we hit the floor running," she says. "We had a lot of cleanup to do. That is where we started. They did not have power or hot potable water." It was about two weeks before she was able to log onto a computer from her station in Gulfport. She brought her laptop with her, plus there was a computer lab available on the base. She found out about the Sloan Semester when she visited the CCD website, where it was announced on the front page. Once she was given permission from her commanding officer, Montez Stack registered for a Sloan Semester microbiology section, which happened to be taught by the same instructor for the class she had dropped out of. She also registered for an ethics section at CCD.

She says there were about 30 Sloan Semester students in the microbiology course and about 45 Sloan Semester students in the ethics course. She believes that she was the only National Guard student in both courses. She calls her fellow students in both courses "incredible," adding that "it was quite impressive to see how these people took their adversity and made it a stepping stone towards their success instead of letting it get them down."

Montez Stack completed and passed both courses. She started taking them while on duty in Gulfport and was fortunate in that she was able to return home to Denver about one-third the way through the 8-week semester and complete her studies under much less stress than what the hurricane-impacted students were experiencing. "I was fortunate that the Sloan program came on board and that they allowed the National Guard to become part of it," she says. "I was not affected at all. I would not be starting my RN program (in Jaunary 2006) if it was not for the Sloan program."

B. Jessie Zeringue

Jessie Zeringue is 39, married with three children (age 7 through 13), and works full-time as a secretary for the Crime Science Division of the St. Charles Parish Sheriff's Department. The Zerinque family also lives in St. Charles Parish, which is 25 miles west of New Orleans. "We did not have as much damage," she says. "We still have our jobs, and most of us have our houses."

Zerinque was getting ready to enter her second semester at Delgado Community College (DCC). Previously she had taken a remedial math course and was now registered for three courses at DCC when Katrina hit. Her goal is to eventually become a registered nurse. When DCC closed down and she found out about the Sloan Semester, she registered for three courses to make up for what she couldn't take at Delgado: English 101 from Southeast Arkansas College, Introduction to Sociology from CCD (Stablein's course), and Introduction to Psychology from Northwestern State University in Louisiana. She had never before taken an online course.

"At first I was a little confused, but it all worked out," she says. 'If I had questions, there were people to contact, and they helped us get what we needed. Once they got our email addresses, they communicated with us and explained what we needed to do. They had open lines of communication."

Zerinque finished all three courses and had a good experience that she was very grateful for. There were some troubling moments, such as not being able to get her books on time and a few communication snafus. But, "overall I would say it was very positive thing. I was able to continue with the same number of courses I was going to take (at Delagdo)." In particular, she had a very high regard for Stablein's sociology course: "She (Stablein) made it great; she was concerned; we had a great discussion board. We learned a lot about sociology, and there was a lot of open communication between the students and the teacher. Everyone's personalities showed through online. That was a really good experience."

C. Jennifer Bernstein

Jennifer Bernstein is 26 and a single mom with a young daughter. She hails form Metairie, a northern suburb of New Orleans. She has a bachelor's degree in psychology and was taking prerequisite courses at DCC that were aimed at possibly getting her accepted into an RN program at Our Lady of the Lake College in New Orleans. She was about to enter her third semester at DCC and was registered for one course when Katrina hit.

At around 5 a.m. on Sunday, August 28, less than one day before Katrina made landfall, Jennifer and her daughter, along with her father, mother and sister, whom she was living with, were notified by a neighbor that a category 5 was on its way and they had better start packing.

It wasn't long before the entire Bernstein family, including Jennifer's grandfather who lived nearby, were boarding up their properties and loading up three cars with their most prized possessions, heading to a relative's house (an uncle on her father's side) in Tennessee.

"It was crazy because we did not have that long to pack," she says. "We assumed that we would be leaving for only a few days. We drove for 14 and a half hours until we got to Birmingham, where we stopped over night. We continued on the next day, and we watched the disaster on television from my uncle's house."

As soon as they were able to, Jennifer and her father and sister drove back to Louisiana to examine what kind of damage they might have sustained. Their home did not have any standing flood water, but the roof was severely damaged and everything smelled pretty bad. Her grandfather's house was completely uninhabitable with about a foot and a half of still-standing water and mold climbing up the walls.

They had to drive back the same day, as there was a 5 p.m. curfew in effect. "We took pictures, and everyone was crying when we got back (to Tennessee). It was horrible," says Jennifer. Fortunately, her uncle owned a vacant condo where the Bernstein's could stay. People in the community came to their aid with extra furniture they donated. Her uncle also had a laptop with a dial-up connection that she could use.

Jennifer found out about the Sloan Semester through the DCC website. Like many Sloan Semester students, she had never taken an online course. She registered for two courses, a nutrition course from Ozarks Technical Community College and a medical terminology course at Tulsa Community College. She says she wound up dropping out of the nutrition course because she could not get PowerPoint to work on her laptop, which was relatively old. She did, however, manage to complete the medical terminology class.

"It has taught me a lot about using the Internet," she says. "I was not one to use the Internet very much, but I thought I should give it a try and do my best. It has been pretty neat." Jennifer adds that she felt learning online was not difficult, although the medial terminology course "was a lot of work," with "a lot of readings and assignments. I have found it to be quite helpful. It has allowed me to complete one of my prerequisites, which is really important."

In the meantime, she has settled in Tennessee until she feels that it's save for her and her daughter to return. Her family has gone back and is working through repair and insurance issues. "It has become a real big hassle," she says.

Finally, she asks, "Will the Sloan Semester will be offering the same deal next semester?"

XIV. LESSONS LEARNED

Although the answer to Jennifer's question, and others like her, is an unfortunate "no," the folks at Sloan-C and SREB have indeed started to look at the possibility of developing an emergency asynchronous learning system that would be ready to respond to the next disaster. It was in this spirit that a group of 10 Sloan-C and SREB personnel who had worked diligently throughout the Sloan Semester came together for a meeting held at SREB's headquarters in Atlanta on December 5–6.

In what turned out to be a very lively, and lengthy, discussions centered around individual contributions, lessons learned and what went well, this group has set the stage for a more in-depth exploration, based on direct experience, into how to build a national, or international, online education system that can be utilized by institutions in the event of a dire emergency in which they are forced to close their doors, as what happened in Hong Kong in 2003 and in the Gulf Coast region in 2005.

It was noted at the Atlanta meeting that the production of the Sloan Semester moved very quickly, and the personnel involved were all able to act on decisions individually without too much oversight, because they were operating under a decision-making process guided by the simple notion that "students come first."

This, along with two well-established online learning organizations having the experienced staff and the appropriate technologies at bay, enabled the Sloan Semester to become a reality.

One of the important questions floated at the meeting was "can we do this again, and will we need to do this again?" The resounding answer was "yes." It was at that point that the meeting then turned to "what can we take from this experience to be able to respond when next time a disaster happens?"

With that question in mind, some of the vital lessons learned, were further discussed at the Atlanta meeting. These lessons are synthesized below.

A. General Lessons Learned

- Institutions were proud to be part of the Sloan Semester.
- Under the right circumstances, you can cut across academic read tape and get things done
 effectively and quickly.
- Sloan-C needs to use the results of the Sloan Semester to push and promote online learning.
- Impacted institutions were not always appreciative of the Sloan Semester because they wanted to
 mount their own mini semester to recover tuition dollars. Such institutions did not support credit
 transfer policies, resulting in many Sloan Semester students dropping out of the courses they
 registered for.
- Credit recognition, transfer and articulation remain as significant issues in higher education, and credits earned online exacerbates these issues.
- Student services are critical. Providing advising services related to registering and obtaining financial aid, etc. are essential.

B. Lessons Learned Related to Students

- Students are unpredictable. They frequently change their minds about what courses they may or may not want to take.
- Students greatly appreciated the Sloan Semester and equated their return to classes as a return to at least partial normalcy in their lives.
- Students served were largely those who did not have the financial resources to enroll in any other alternatives.
- Because students did not have any personal financial investment in the Sloan Semester, some felt it easier to just walk away when they fell behind in their course work.
- Some students tried to take too many classes. The lure of "free" may have been too tantalizing.
 Many students did not have a good understanding of what an online course would actually entail.

C. Lessons Learned Related to Communications

- University websites are the key tool for reaching students in a crisis.
- A number of institutions did not do a good job of contacting students once they accessed the VESAs. Some institutions batch processed applications in an untimely fashion, causing students to drop out because they were not properly notified of their acceptance. Some institutions also

- sent out mass emails to accepted students, resulting in spam filters blocking such messages, leading to more drop outs.
- It was incredibly difficulty to contact administrators and students from impacted institutions even with readily available email addresses and phone numbers.
- Updating content on the Sloan Semester website was a challenge. For example, FAQs and other
 information can become outdated in a few days. Having a system that incorporates regularly
 scheduled and timely content editing and updating is important.

D. Lessons Learned Related to Financial Issues

- Money, or lack of it, is a powerful force that was (and remains) a real concern for many impacted
 institutions and seemed to drive many of their decisions (to the detriment of what the Sloan
 Semester was seeking to accomplish).
- Financial aid issues burdened many students, particularly their situation with Pell grants and federal loans.
- The cost of textbooks was, in many cases, enough of a financial burden to prevent students from participating in the Sloan Semester.

E. Lessons Learned Related to System Operations

- Messages and procedures need to be formally systemized to avoid frustrations related to handling student application processing and service responsibilities.
- Schools and students thought the system was instantaneous and did not allow adequate time to process forms and requests. For example, lag time between course closures and students filling out their VESAs completely and correctly caused a problem. Also, courses should have closed registration at least one week in advance of start time to allow for applications still in the pipeline to get processed, as well as for students to obtain their necessary course materials in a more timely fashion.
- There needs to be an intuitive application process, as well as an efficient and easy drop/add process. Overall, the application feed and download processes should require as little human intervention as possible.
- What is perfectly clear language to some people can be confusing to others. Therefore, if possible, a mock system test with a panel of uninvolved students and personnel would be a helpful and informative endeavor.

F. Lessons Learned Related to Building a Course Catalog

- Building a mechanism that limits the number of offerings of any one particular subject listed in
 the online catalog would have made the entire course registration process smoother. There were
 too many similar courses being offered, leading to enrollments spread widely, and in small
 numbers, across multiple sections.
- It was difficult to find providers of some specialty courses, such as courses in pharmacy, message therapy, and various special courses needed by some students to meet graduation requirements.
- It was difficult to find exact matches for certain types of mainstream courses, such as chemistry
 and biology courses for science majors, various information technology courses, and nonEurocentric world civilization courses.

• It is important to take great care in matching up courses to what students actually need to take.

XV. CONCLUSION

The big picture view of the Sloan Semester reveals a complex mix of interactions and processes that, in the end, resulted in achieving its main objective to keep students moving along their educational pathways during an unexpected time of need.

It needs to be noted that the Alfred P. Sloan Foundation that funded the Sloan Semester had a sincere trust in the leadership ability of Sloan-C from years of working together in an ongoing effort to expand and promote asynchronous learning. Without that trust, the Sloan Semester would have never happened.

In addition, the Sloan Semester has helped to make it more evident that online learning is recognized as being equal to on-campus learning. Oakley notes that in all of the radio interviews he and Schroeder participated in the issue of quality in online learning never came up.

Finally, perhaps the most endearing take-away message that came out of the Sloan Semester is that our country's spirit of volunteerism is alive and well. Oakley, for instance, explains how working with all the Sloan Semester staff, who put in plenty of overtime hours without compensation, as well as working and communicating with the many faculty and staff from the provider institutions "was an incredibly uplifting experience. It restored my faith in human nature. So many people stepped forward to help."

"It was one of the most pleasurable experiences I ever had," adds Seaman. "You were not doing this to make money. You were not doing this for some anonymous corporation. You were doing this because there were people in need, and maybe this would help them. You were doing it for a reason you could feel good about."

"If you can hit the right cord or nerve within the academic community, they will step up and respond," says Chaloux. "Clearly we had to make all the pieces fit together in order for the Sloan Semester to work. The next story is how do we learn from this, and how do we prepare for deployment next time."

XVI. ABOUT THE AUTHOR

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XVII. ACKNOWLEDGEMENTS

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XIX. APPENDIX A

Emergency ALN: Delivering the Curriculum When the Campus Is Closed Pre-Proposal for a National Workshop

Much attention has been given to business continuation in the wake of terrorism, natural disaster, and epidemics. But, precious little planning seems to have been put into the continuation of teaching and learning in higher education if physical campuses must be closed for a period of more than a week or two. Certainly such cases are not without precedent; earthquakes, hurricanes, and wars all have taken their toll on universities over the centuries. In the 21st century we have come to learn all too well that no country, no institution is impervious to terrorism. Several campuses were seriously affected by the World Trade Center destruction. Buildings, air quality and access were all issues that impacted NYU and PACE among others. But, perhaps it is the looming potential of bio-terrorism and even the apparently naturally-evolved avian flu [1] that poses the most ominous near-term threat to U.S. colleges and universities. Health organizations worldwide are now saying it is not a matter of "if" but rather "how soon" we will face a deadly pandemic of avian flu. The dense dormitory housing in colleges has been long known to be most vulnerable to the spread of such contagious diseases.

Much is at stake for both the institutions and the students enrolled in those institutions. If campuses were closed for more than two or three weeks, many classes could not be completed during the semester. Many students would refuse to pay tuition and fees. All students would be inconvenienced and most delayed in their graduation schedule. Many institutions would not have the cash flow to cover salaries and essential services. Even if the problem were resolved within a semester, many of the students would have transferred elsewhere to complete their degrees, and fewer prospective students would be ready to enroll at a campus with a closure history.

Amid these threats, colleges and universities would be best served if they were to develop contingency plans to continue the delivery of the curriculum if their campuses must be closed. One need only look to the SARS epidemic in Hong Kong to see examples of how some forward-thinking universities were able to deliver their classes in the face of campus closer. Through collaborations with UK universities, a number of classes were able to continue using ALN technologies [2].

At the University of Illinois at Springfield, we have developed a business continuation plan for IT. Just this year, we integrated into that plan methods, milestones, and procedures for continuing the delivery of all of our classes using ALN technologies in the case of an emergency closure of the campus. In developing the plan, we confronted and addressed many issues that are shared by all campuses which engage in such planning. While there are aspects in our plan that are unique to our campus, we believe that our approach provides a prototype for such emergency planning.

A sampling of the issues that must be addressed are:

• Integrating a course management system into the entire curriculum

- o Assuring that every course is provided space in the system and that every syllabus is posted
- o Proprietary and open source alternatives
- Training faculty members on the use of course management systems to supplement on campus courses and to ramp-up as the primary mode of delivery in case of emergency
- Training students in the use of course management systems
- Determination of milestones for plan deployment (i.e. notice on campus web page on day one, shifting of all classes to online mode on day ten, activation of remote training sites on day seven, etc.)
- Alternative modes of contact with students such as mail, telephone, and schedule synchronous meetings in web conferencing rooms.
- Remote location of servers—either physical re-location of servers from the campus or remote
 back-up sites from which materials may originate in the case of an emergency that cuts campus
 connections to the Internet or continues for a lengthy period of time without physical access to
 campus servers.

The stakes are very high. Terrorism and pandemic threats appear to be increasing. How can we help other campuses across this country to best prepare to continue operations in the face of these threats? One solution would be to launch a series of rapidly cascading workshops to spread best practices across the country over a matter of months.

Workshop Proposal

We propose hosting a two-day workshop at the University of Illinois at Springfield. Presenters at the workshop would include persons from two or three universities that have confronted such closures and two or three universities that have developed comprehensive plans; representatives of federal or state offices of emergency preparedness, homeland security, and related agencies. Participants would be selected from among Sloan Consortium member colleges and universities. Approximately 24 representatives from a range of community colleges, regional universities and R-1 institutions would be invited from geographically dispersed sections of the country.

Outcomes of the workshop would be that each participating institution would develop a comprehensive emergency plan for the continuing delivery of on campus classes in a situation where the physical campus would be closed for a period of two or more weeks. Most importantly, each participating institution, as a condition of participation, would agree to deliver a one-day workshop on their campus within six months of the Springfield workshop. Each of these secondary workshops would include at least ten institutions within driving distance. The secondary workshops would include distribution and explanation of template planning documents for the rapid development of a workable teaching/learning continuation plan using ALN technologies.

A central web site would be maintained with all of the essential documents and materials for conducting the workshops. The site would also provide discussion boards (perhaps through the Sloan-C community Moodle) and a daily update of relevant news and developments such as we provide at Sloan-C through the RSS dissemination of my blog.

The most immediate outcome of the Springfield workshop would be 264 colleges, community colleges, and universities spread across the country developing effective curriculum delivery plans within nine

months. The workshops would generate news coverage, journal articles and presentations at professional conferences, all of which would further spread the practices.

One anticipated side-effect of the spread of ALN-based contingency curriculum delivery plans that will come from the Springfield workshop is an expansion of exposure and use of ALN among colleges and universities across the country. Plans will call for at the very least a minimal use of a course management system for every class on participating campuses. Surely many faculty members will be exposed for the first time to these technologies. Some of those may take advantage of the technologies to move their classes into blended or fully-online delivery modes.

The central location of Springfield, Illinois with service via major east-west and north-south interstates, Amtrak, and American Connection and United Express airline jet connections to Chicago and St. Louis make the location a good one for economy of travel expenses. The collective ALN and workshop delivery experience of the University of Illinois campuses and U of I Online assure that this workshop will be successfully run. The relatively low cost of high quality Crowne Plaza, Renaissance, and Hilton hotels in this small city also reduces overall expenses. New, technologically-advanced facilities on the campus assure we will have the connectivity and display capabilities for an excellent experience. An array of historical Lincoln sites in Springfield, including the newly-completed Abraham Lincoln Presidential Library and Museum provides an interesting diversion for spouses and others who might accompany attendees.

Conclusion

We are motivated to share our experiences in developing an emergency curriculum delivery plan based on ALN technologies as a way of sharing with others what we have learned. This is a critical need that is time sensitive. We believe that by cascading workshops we can most effectively spread the best practices nationwide within a year. Our experience in ALN, combined with economies of our location, make UIS and Springfield, Illinois the best choice for hold such a workshop.

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XX. APPENDIX B

Sloan Foundation Response to the Katrina Disaster—Version 1.4

Submitted 31 August 2005 by:

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An editorial in the New York Times on 31 August 2005 stated:

Those of us in New York watch the dire pictures from Louisiana with keen memories of the time after Sept. 11, when the rest of the nation made it clear that our city was their city, and that everyone was part of the battle to restore it. New Orleans, too, is one of the places that belong to every American's heart—even for people who have never been there. Right now it looks as if rescuing New Orleans will be a task much more daunting than any city has faced since the San Francisco fire of 1906. It must be a mission for all of us.

On 30 August 2005, Tulane University President John Cowan wrote:

Our third priority is to develop a recovery plan. This task is impaired right now by the devastation of the city and its infrastructure, and deteriorating further due to the flooding we are now facing. In addition, we don't know when our employees will be able to return to the city, much less to the university. Therefore, until conditions stabilize, it is impossible to do any longer term recovery planning. However, part of the responsibility of the senior leadership team in Jackson, MS is to begin the planning and they have done so.

A number of colleges and universities in Louisiana, Mississippi, and Alabama have been closed due to Hurricane Katrina. Some of them will not open again this fall—some might not open again this year. Students enrolled at these institutions will lose at least a semester of study and some within reach of completing a degree will not be able to complete programs. Innovative educational alternatives for these students and their institutions must identified—quickly. Some of those alternatives will involve relocating students to other campuses in the region. Another alternative is to bring online learning to those students impacted by Katrina. There is a clear role for ALN to serve these students that cannot be served by other measures. Specifically, ALN, through the combined efforts of Sloan-C and its member colleges and universities and the Southern Regional Education Board's Electronic Campus, can create an academic "pipeline" to help serve students who have returned or moved to other parts of the country due to the disaster. The proposed initiative would provide online education that will enable their learning to continue over the next several months.

Sloan-C institutions that currently provide ALN degree programs have the experience to respond on a national scale to address this crisis. Based on our initial surveys, faculty at Sloan-C institutions want to volunteer to provide assistance. We are proposing the following:

- The Sloan Foundation would partner with the Southern Regional Educational Board (SREB) and with the Sloan Consortium (Sloan-C) to launch a multi-pronged approach to serving the educational needs of students enrolled at impacted institutions.
- SREB will work with state leadership to develop list of impacted institutions that currently are unable to serve their own students.
- SREB would take the lead role in working with state government and presidents of universities to promote awareness of this initiative.
- SREB would coordinate with provosts to develop a list of most critically needed courses –note that courses are considered the core element here (not full degree programs), since disaster victims will be seeking courses, not programs.
- Sloan-C will solicit institutions from its membership that desire to participate in this initiative by offering ALN courses to victims of the Katrina disaster.
- Sloan-C institutions would offer to teach additional ALN courses during an accelerated fall semester, which would begin on Monday, 8 October 2005, and end eight-weeks later in mid-December. These institutions would list their courses in a special Sloan-C catalog.
- Sloan-C would create an online catalog listing of these courses and make the catalog available on the Sloan-C website and linked from the SREB website. Institutional leaders would be invited to contribute ALN courses to the catalog.

- SREB would maintain a database of students from the impacted institutions, in order restrict the initiative just to these students. SREB's Visiting Electronic Student Authorization (VESA) could be deployed to assist institutions and students in streamlining admission/registration efforts.
- Students could enroll in any course offered from Sloan-C institutions in the catalog. This catalog will be placed on the Sloan-C site. There will be a place for institutions to list the courses that they will provide and a link to a description and/or course syllabus. A search engine would be added. The idea would be to provide a searchable listing of courses that Sloan-C institutions have agreed to offer under the disaster relief program. The catalog will be searchable by institution, as well. If there is sufficient preparation time, we can add listings that compare institutions (Doctoral I, etc.). This can be done using USN&WR listings or IPEDs data.
- The Sloan Foundation would provide a grant to Sloan-C (SCOLE at Olin College), in order to subsidize the cost of offering these additional courses sections. This subsidy would be in the form of a block grant to each providing institution, based on the number of course sections taught.
- Sloan-C institutions participating in this initiative also will be asked to provide access to Internet technologies for faculty from impacted institutions, so that those who had access to the Internet could interact with their students. For example, faculty could "podcast" lectures [even recording with audio tapes] to their students.

The publicity generated by this initiative will have direct positive benefit to the Sloan Foundation and to all of the participating institutions. It also will do much to advance awareness of ALN among the general public. It is not inconceivable that other foundations will want to contribute to this, or that there could be a national fund-raising campaign to support this initiative (every website now has a "Contribute to Katrina Relief" link). There also could be a fund-raising initiative targeted to alumni of impacted institutions. The Sloan-C website could also create a place for people to contribute to the program.

Overall, this initiative is designed to serve students that have been impacted by the Katrina disaster. It will serve to keep them advancing in the educational pipeline until they can return to their home institutions. In some way, it will help to restore normalcy to the lives of those students impacted so severely by this disaster. It is about serving the thousands of impacted students, until their own institutions are able to welcome them back.

This proposal has been prepared in less than one day; it was begun once the magnitude of the Katrina disaster was known. Please note that there is another layer of detail underlying the general proposal. For example, SREB will work to cut through the red tape involved and make this happen. We will encourage institutions participating in this program to have their campus bookstores work with publishers to donate textbooks to students participating in the initiative. The SREB will work with impacted institutions to ensure that credits earned in this initiative will transfer. Other ideas will be developed as we continue to move forward with the initiative.

Budget:

\$2,500 blanket grant per course section, 400 course sections \$1,000,000 [25 students in each section, meaning 10,000 course enrollments]

Note that an institution having a modest tuition rate of \$200 per credit hour would normally generate \$200/credit hour x 3 credit hours x 25 students, or \$15,000 in tuition (plus any fees). So the grant of \$2,500 per course would essentially mean that the Sloan Foundation funding would be leveraged by a factor of at least five by the contributions from the institutions. The assumption in this proposal is that the \$2,500 would be used as a stipend paid to the instructor teaching the course—that is, all of the funding from the Sloan Foundation ultimately would go to faculty, not to institutions.

The SREB will contribute time of key personnel (e.g., Bruce Chaloux) for coordination of this initiative. The University of Illinois will contribute time for Burks Oakley to assist with this project for the fall semester. Sloan-C will use its contingency fund to develop the catalog and purchase mailing lists for notification of Presidents and Provosts.

About SREB

The Southern Regional Education Board (www.sreb.org), headquartered in Atlanta, Georgia, was created in 1948 by Southern governors and legislatures to help leaders in education and government work cooperatively to advance education and improve the social and economic life of the region. It provides a variety of services to its member states and seeks to find ways to share resources and to enable states to achieve together educational programs and improvements that would be impossible or financially impractical for a single state. SREB is governed by a Board that consists of the governor of each member state and four people that he or she appoints, including at least one state legislator and at least one educator. SREB is a nonprofit, nonpolitical organization. It is supported by appropriations from its member states and by funds from private companies, foundations, and state and federal agencies.

SREB's sixteen member states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

XXI. APPENDIX C

Rules and Responsibilities for Participation in Sloan Semester

Providing Institutions refers to colleges and universities offering courses in Sloan Semester. Impacted Institutions refers to colleges and universities from Alabama, Louisiana and Mississippi disrupted by Hurricane Katrina.

Colleges and Universities

- 1. Providing institutions must be regionally accredited.
- 2. Providing institutions must be or become members of Sloan-C (free registration available on Sloan-C web site).
- 3. Providing institutions must be authorized to participate in Sloan Semester by the Sloan Semester Steering Committee.
- 4. Courses listed in the Sloan Semester catalog must commence on or after October 10, 2005 and conclude by January 6, 2006. Providing institutions may develop their own course schedules within those start and end dates. However, the recommended schedule is an eight-week accelerated semester, starting on October 10.
- 5. All courses offered by providing institutions must carry regular academic credit and the credits recognized as degree credit.
- 6. Providing institutions agree that students enrolling in courses listed in Sloan Semester will not be charged any tuition or fees, including technology or connection fees, for enrolling in courses with the exception of required textbooks and course materials.
- 7. Students will not be required to be admitted to providing institution but cleared to register as a "guest matriculant" or "transient student."
- 8. Providing institutions agree to accept the Southern Regional Education Board's Visiting Electronic Student Authorization (VESA) that students will complete as the "application" for Sloan Semester

- (see VESA description and the VESA data elements). VESA will establish student authorization to register for courses at providing institutions
- 9. Providing institutions will make available a convenient and easy process for students to register for courses remotely.
- 10. Providing institutions agree to forward an official transcript to the student's home institution following submission of grades by faculty at no cost to the student.
- 11. All courses listed in Sloan Semester will be offered entirely online (largely asynchronously). Providing institutions will not require any on-campus or residential requirement for courses in Sloan Semester.
- 12. Courses approved and listed in Sloan Semester will be displayed in the SREB Electronic Campus course information format. Providing institutions will submit course information through a Web "back office" interface provided by SREB.
- 13. Providing institutions are encouraged to list in their course descriptions on the Sloan Semester website essential prerequisite requirements for any course in Sloan Semester (part of the SREB format).
- 14. Providing institutions agree to offer any course that has a minimum of 3 students enrolled by the start date of the course. Sloan-C reserves the right to combine or collapse courses/sections to accommodate students.
- 15. Providing institutions and Sloan-C may agree to allow courses with fewer than 3 enrollments to be offered when individual student circumstances dictate.
- 16. While courses listed in the Sloan Semester catalog are primarily targeted at students from impacted institutions in Alabama, Louisiana and Mississippi, providing institutions may enroll "native" students or others not from impacted institutions on a space available basis. Priority, however, will be given to those students targeted for Sloan Semester and at least 50% of "seats" established must be held until the registration deadline. Providing institutions may apply their regular policies and procedures for admission, tuition and fees, etc. for "native" students or others who are permitted to enroll.
- 17. Providing institutions will receive a stipend from Sloan-C based for any course that meets the minimum enrollment threshold. The enrollment scale applies only to students participating in Sloan Semester. Stipends will be allocated according to the following scale:
 - 3–5 enrollments \$1000
 - 6-10 enrollments \$1500
 - 11 or more enrollments \$2500

Stipends will be based upon students enrolled in a course on fifth day following the established start day of the course.

- 18. All academic policies and procedures of the providing institution, including course requirements, grading guidelines, and administrative procedures with the exception of those adopted by Sloan-C and agreed upon by providing institutions for Sloan Semester, will govern student participation.
- 19. Providing institutions agree to make available without cost all regular online resources and services to participating students, including access to online library resources and services, course or learning management systems, etc.
- 20. Providing institutions will establish an information page and link to it for Sloan Semester students to facilitate student registration.
- 21. Providing institutions will notify Sloan-C when the course is full and no additional students can be registered. Closed courses will be so designated on the Sloan Semester catalog.

- 22. Providing institutions will forward to Sloan-C confirmation of student registration and course completion data at dates to be determined.
- 23. Providing institutions and Sloan-C may amend these policies and procedures to meet any special cases or circumstances or to accommodate and meet the needs of students.
- 24. Institutions listing courses in the Sloan Semester catalog must agree that they will abide by the Rules and Responsibilities for Participation in the Sloan Semester. The Sloan Consortium agrees to provide the institution with the designated stipend amount for each course offered based upon verification of the number of Sloan Semester students enrolled at the official census date of five days into the accelerated semester.
- 25. Institutions that are unable to conform to the policies and procedures outlined for participation in Sloan Semester (e.g. those institutions unable to waive tuition and fees or that have calendars that do not fit with the Sloan Semester calendar) will be listed as under "Online Alternatives to Sloan Semester" on the web site (with their consent). These courses will not be eligible for Sloan C stipend awards.

Students

- 1. Eligibility for the Sloan Semester will be limited to students matriculated for the Fall Term at institutions in Alabama, Louisiana and Mississippi designated by those states as "impacted institutions."
- 2. Students may enroll in up to 12 credit hours (semester) or the equivalent in Sloan Semester.
- 3. Students may take courses from multiple providing institutions.
- 4. Students must complete and submit the online SREB VESA application to participate and to be authorized to register/enroll in courses at providing institutions. VESA will serve as a "passport" to enrollment at participating institutions.
- 5. Students will be required to meet all prerequisite requirements of providing institutions.

Sloan-C Responsibilities

- 1. Sloan-C will establish procedures for the review and approval of institutions and courses to be offered in Sloan Semester.
- 2. Sloan-C will authorize/approve the institutions and courses to be listed in the Sloan Semester catalog.
- 3. Sloan-C will process payments to providing institutions.
- 4. Sloan-C will provide access to a Call Center for interested students.

SREB Responsibilities

- 1. SREB will host all courses on the Electronic Campus in a special section to be developed for Sloan Semester. Students will be able to access the site from the Sloan Semester site, Electronic Campus, and from providing institutions.
- 2. SREB will determine with state leadership in Alabama, Louisiana and Mississippi those institutions designated as impacted institutions whose students will be eligible for Sloan Semester.
- 3. SREB and impacted institutions will establish a procedure for verifying student eligibility.
- 4. SREB will collect student information using VESA and will forward this information, electronically or by fax, to providing institutions along with the course(s) the students have indicated an interest in enrolling in.
- 5. SREB will provide access to its "back office" to those providing institutions approved by Sloan-C and will use its existing protocols to authorize access.

6. SREB will make available its course format and search features in the Sloan Semester site within the Electronic Campus.

How the Sloan Semester Will Work

- 1. Students from impacted institutions will find their way to the Sloan Semester site hosted by Sloan-C (www.sloansemester.org) for general information about the program.
- 2. Students can click on "Review Available Courses" from the Sloan Semester site and will be transferred to the Sloan Semester page on the Electronic Campus (Sloan Semester EC).
- 3. Students will establish an account on the Sloan Semester EC (this is free and will auto-populate the VESA application downstream).
- 4. Students will be able to search the catalog by discipline, institution, level on Sloan Semester EC.
- 5. Students will locate the course(s) they wish to take and post those upon completion of the VESA application
- 6. Students will complete the VESA application and submit it (auto-populated from registration/profile information completed earlier) automatically submitted upon hitting submit button)
- 7. SREB will be notified of the submission at the time the student hits the submit button. Confirmation of receipt will be sent to the student (automatically generated)
- 8. SREB will verify VESA is complete and will confirm with impacted institutions that the student is a matriculated student at that institution (procedures to be developed).
- 9. SREB will forward VESA information, including contact information for the student and the courses the student has indicated an interest in taking, to providing institutions. Providing institutions will establish the necessary student record from VESA and contact student about registration/enrollment process.
- 10. Participating institutions will forward confirmation of registration to Sloan-C (process to be determined).

Procedures Governing Listing of Online Courses in Sloan Semester Catalog

Colleges and universities will be notified of the approval to participate in Sloan Semester (henceforth called "providing institutions") by September 11th and may begin the process of entering courses into the online catalog after that. The procedures follow.

- 1. Institutions will be notified by the Sloan Semester Steering Committee (SSSC) of their selection as a providing institution. This will signal authorization to list courses in the Sloan Semester catalog.
- 2. Providing institutions will establish a single contact person (name, telephone number and email address) to coordinate Sloan Semester activities. This person will work directly with SREB staff on all matters related to course entry in the Sloan Semester catalog.
- 3. After a contact person has been designated, SREB, the host of the Sloan Semester catalog, will begin direct communications with the institutional contact person. An account will be established for the institution to the Course Data Entry (CDE) system, a Web-based "back office" interface needed to input course information into the catalog. Instructions for using the CDE system and interface also will be provided. (While multiple persons at a providing institution may input course information, the contact person will manage/control the process and only one authorized id and password for each providing institution will be issued.)
- 4. The SSSC has set a limit of **15 courses** per providing institution. Institutions in multi-campus system, consortia or branch campuses will be considered as separate providing institutions. There is no minimum number of listings.

- 5. In the initial round of course entry (September 9-15) providing institutions may list up to **10 courses**. While institutions are "free" to list whatever courses they wish, the SSSC will provide general guidance about the disciplines, courses and level of offerings in which students have initially expressed interest. Courses may be offered at the undergraduate or graduate levels.
- 6. In the second round of course entry (September 16-23), the SSSC may ask providing institutions to list up to **5 additional courses** based up more specific course needs of students.
- 7. Finally, the SSSC will use "wildcards" to seek courses or sections of courses needed. This may include asking providing institutions to go beyond the 15 course cap.

The SSSC reserves the option of limiting certain courses (e.g. if providing institutions list multiple sections of the same course), asking providing institutions to reduce or consolidate courses, or otherwise taking steps to ensure the most robust and responsive catalog for students. No action will be taken without consultation with providing institutions.

CRITICAL EVENT PREPAREDNESS AND RESPONSE: KEYNOTE ADDRESS TO THE 2006 SLOAN RESEARCH WORKSHOP BY JON LINKS

Janet C. Moore
The Sloan Consortium

ABSTRACT

At the intersection of online education and preparedness, Johns Hopkins University's (JHU) Center for Public Health Preparedness provides all-hazards preparedness and response training for public health and public safety professionals. This report comes from Jonathan Links' keynote address to the Sloan Summer Research Workshop in Baltimore, Maryland in August 2006.

KEYWORDS

Critical Incidents, Continuity of Operations, Preparedness, Training, Online Education

I. INTRODUCTION

In 2000, the Center for Disease Control and Prevention (CDC) developed a national network of Centers for Public Health Preparedness (CPHP) [1]:

...to strengthen terrorism and emergency preparedness by linking academic expertise to state and local health agency needs. The program has grown to become an important national resource for the development, delivery, and evaluation of preparedness education. Within the CPHP program, colleges and universities provide preparedness education to public health workers, healthcare providers, students, and others. Currently, 52 CPHPs are established in universities within schools and colleges of public health, medicine, nursing, veterinary medicine, pharmacy, biological sciences, in a community college, and in several university-based medical and health science centers. CPHPs work in close collaboration with state and local health agencies to develop, deliver, and evaluate preparedness education based on community need. [1]

Funded by CDC and led by Jonathan Links [2], the Johns Hopkins University-Center for Public Health Preparedness (JH-CPHP) [3] provides training and education to public health and public safety personnel at the state and local levels, as well as in community-based organizations and other entities charged with carrying out CDC programs and the control and prevention of bioterrorism and infectious disease through all other types of hazards and emergencies (natural, accidental, intentional).

At Hopkins, the JH-CPHP's activities are complemented by the Johns Hopkins' Office of Critical Event Preparedness and Response (CEPAR). CEPAR [4] is the command center—and clearinghouse—for enterprise-wide (throughout Hopkins) planning for and reaction to a catastrophe, particularly involving bioterrorism or nuclear or chemical attack. CEPAR's objectives are:

- 1. To create, develop and implement a model infrastructure for effective JH enterprise-wide planning and preparedness for critical events requiring a medical/public health disaster response.
- 2. To develop a model medical/public health disaster response plan integrated with local, regional,

military and other federal assets.

3. To serve as a model medical/public health disaster planning and response system adaptable to other major metropolitan areas nationally and worldwide. [4]

Thus, JH-CPHP is outward-looking, and JH-CEPAR is inward-looking.

JH-CPHP staff [5] includes a coordinator, trainers, mental health expert, instructional designer, and faculty from the Center for Teaching and Learning with Technology, Environmental Health Sciences, Health Policy & Management, Interdepartmental Program in Applied Public Health, International Health, the Johns Hopkins Center for Communication Programs, Psychiatry and Behavior Sciences, and other faculty in the School of Public Health and School of Medicine.

II. ACTIVITIES AND SERVICES

JH-CPHP develops interactive learning activities in a broad range of preparedness-related fields, including radiation and dirty bombs, occupational health, food and water security, mental health, and cultural competence, including:

- Face-to-face and online training events
- Seminars and conferences
- Certificate programs
- Academic coursework
- Ongoing resources: CD-ROMs, reference books and resource library materials [3]
- One of the Center's "premiere" products is its Road Map to Preparedness.

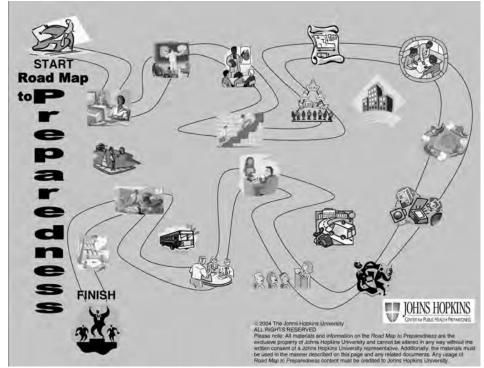


Figure 1. Roadmap to Preparedness

The Road Map depicts a training program based on CDC preparedness competencies for preparing public health personnel for emergencies. JH-CPHP designed a manual and materials for trainers who teach the Road Map to Preparedness training program to all remaining employees in their own health departments:

The Road Map's goal is to provide a basic training curriculum, applicable to all health department employees, to help them achieve the competencies outlined in the CDC/Columbia University Bioterrorism & Emergency Readiness: Competencies for All Public Health Workers.[6] (The Center also provides learning objectives [7] that each participant will be expected to achieve.) Because the work of a busy public health department must continue despite the need for this additional training, the program consists of a combination of agency-led activities and self-study activities. Also, because employees are asked to accomplish this training program in addition to their regular duties, it was designed to be fun and game-like. [8]

A free online repository provides learning opportunities with courses and training activities, tools, and educational programs offered through the entire Center for Public Health Preparedness network at the Public Health Preparedness Resource Center [9] maintained by the Association of Schools of Public Health. Terrorism and emergency response training and educational resources developed by the CDC-funded Centers for Public Health Preparedness "address a wide-array of public health and emergency response topic areas and are presented in various formats including CD-ROM, web cast, exercise/drill/tabletop manuals, comprehensive course outlines and much more. This information is intended for public health professionals and other community partners both in the field and in the classroom" [7].

Web modules from JH-CPHP are available on topics including:

- Agriculture, Food, and Water
- Chemical, Biological, Radiological, Nuclear Terror
- Infectious Disease and Vaccines
- Legal Issues
- Mental Health Preparedness
- General Public Health Preparedness

Short courses include:

- Public Health Response Team Institute
- Emerging Infectious Respiratory Diseases
- Dirty Bombs Preparedness & Response
- Psychological Aspects of Terrorist Events
- Agricultural Security & Public Health
- Epidemic Intelligence Service Conference
- Disaster Mental Health
- Corporate Emergency Preparedness

JHCPHP achievements are shown in Tables 1 and 2:

Activity	Promised	Delivered
R2P	3000 (10 dept's)	3923 (10 dept's)
Web modules	1100 (12 old + 10 new modules)	1582 (12 old + 15 new modules)
Short courses	600 (6 courses; 9 days)	881 (8 courses; 10 days)
Prep Cert	10	7
MPH Prep Conc	10	8

Table 1. Year 1 Reach

Activity	Promised	Estimated (as of Aug 2006)
R2P	850 (7 dept's)	3081
Web modules	2000 (52 modules)	3500
Short courses	850 (6 courses)	1619
Prep Cert	7	3
MPH Prep Conc	8	8
Training Series	500 (3 series)	520
NIMS Training	400	780

Table 2. Year 2 Reach

In addition, partners have requested training in:

- Basic Public Health/Surveillance
- All-hazards/ Chemical, Biological, Radiological/Nuclear, and Explosive (CBRNE) Incidents
- National Incident Management System (NIMS)
- Emergency Response Plans (developing, understanding, and using)
- Mental Health
- Legal/Ethical Issues
- Personal Protective Equipment (PPE)
- Drills and Exercises

III. TRAINING ISSUES

A. Barriers to Training

Barriers to training include the release of staff from regular duties to attend training during business hours and the costs associated with training and temporary staff replacements. Attendants may perceive that the training is not relevant to their duties, or they may perceive that their role in an emergency is not important. Without training that inculcates responsibility, response to incidents is subject to a range of perceptions:

- Perception of existing knowledge about public health impact of pandemic influenza
- Confidence in personal safety
- Family preparation
- Health Department's perceived ability to provide timely information
- Perception of the capacity to effectively communicate risk
- Familiarity with one's role-specific response requirements
- Perception of the importance of one's role in the agency's overall response
- Perceived importance of preparedness training and education [10]

Trainers must take into account that people may not believe threats are real. Figure 2 shows that "preventive health behavior is influenced by five factors: (a) perceived barriers to performing the recommended response; (b) perceived benefits of performing the recommended response; (c) perceived susceptibility to a health threat; (d) perceived severity of a health threat; and (e) cues to action" [11].

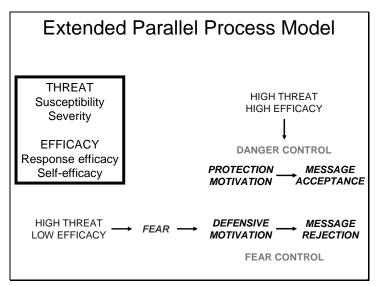


Figure 2. Extended Parallel Process Model

To address these perceptions, it is necessary to change the traditional approach to learning, focusing not just on knowledge, but instead seeking to transform attitudes, beliefs, and behaviors, as illustrated in Figure 3.

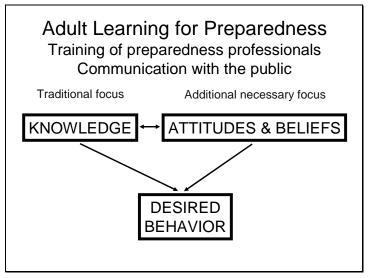


Figure 3. Focus for Preparedness Learning

B. Customization Preferred

Although a great deal of online training is available [12], a barrier may be that people may not take online learning as seriously as they take in-person learning.

JHCPHP finds that certain groups prefer customization to one-size-fits-all approaches. Thus, a typical training day might consist of morning table talk, followed in the afternoon with didactic presentations based on morning table talk. Because workers in public health and public safety have different cultures, languages and affects, customization helps to bridge the distance among groups.

C. Assessment

JHCPHP administers multiple choice exam administered pre and post training, and evaluates real time audience understanding with response system that uses individual remotes tied to participants' identity. Some example results show improvement:

- Roadmap to Preparedness: 47%–77%
- Dirty Bomb Table-Top: 57%–73%

However, the big challenge is how to assess longer term outcomes after 6 months or more, and how to measure real changes in practice and performance so that readiness is part of everyday awareness.

D. Format

Training can occur in a variety of formats. JH-CPHP reports relative interest in the following formats:

Short courses 48% high interest; 35% moderate interest Courses that offer CE credit 55% high interest; 21% moderate interest On-site training 56% high interest; 31% moderate interest Certificate programs 40% high interest; 26% moderate interest

Master degree credits 34% no interest; 21% low interest

IV. ALL HAZARDS

A theme of all hazards training is that 98% of response is the same. However, each kind of event occurs in stages that are also known as triggering events. The figure below, for example, shows the plume-shaped dispersal effects of a dirty bomb detonated at the Baltimore harbor, suggesting a range of health effects and priorities for responders. Simulations such as those that produced this figure are useful in running table-top exercises.



Figure 4. Dirty Bomb Dispersion

Triggering events for Avian or Pandemic Influenza are identified in 6 phases according to the World Health Organization:

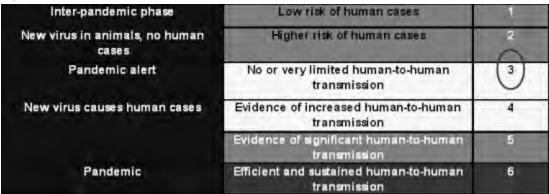


Figure 5. WHO: 6 Phases of Pandemic, October 2006 [13]

V. CONTINUITY OF OPERATIONS PLANS (COOPS)

Academic continuity of operations plans (COOPS) have traditionally focused on continuity of business (see [14] for example). However, with the advent of online education, it is now possible to plan for continuity of educational and research activities before, during, and after the emergency.

Figure 4 depicts Johns Hopkins' School of Public Health leadership and authority incident command structure in the context of pandemic flu preparedness and response:

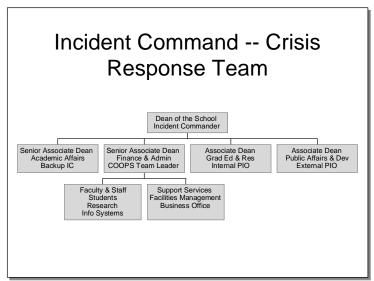


Figure 6. Incident Command Structure

JHU is developing plans to enable fully online delivery of courses and establishing policies for class and course cancellation and for excused and unexcused absences. It is planning for freezers to maintain biological specimens. It is also examining strategies for paying union employees who can work from home and for insuring against disease. Among the biggest concerns is providing for added capacity for servers, networks, and software licenses.

Keeping in mind that people need to remain aware of continuity planning as part of routine operations, JHU prepares all-hazards readiness and ask what triggers actions from one stage to the next. For example, in the event of pandemic when absenteeism is expected to be 40–50%, routine operations emphasize readying alternative communications (website backups, palm held devices, 2-way radios), flu shots, and travel screening; reduced operations would cancel seminars, clubs, and visitors; at the essentials stage, only mission critical personnel will be physically present. In all these contingencies, JHU emphasizes that preparedness is not just planning to "do," but actually "doing."

VI. ADDITIONAL READINGS: PEER-REVIEWED ARTICLES

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INFORMATION TECHNOLOGY SERVICES SUPPORT FOR EMERGENCIES

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I. BACKGROUND

For at least the last quarter century, enterprises—including higher education institutions—have increasingly relied on Information Technology Services (ITS) for business functions. As a result, IT organizations have had to develop the discipline of production operations as well as recovery procedures to respond when those operations are disrupted. More recently, both the academic and research mission activities of higher education institutions have become increasingly supported by ITS. That ITS touches almost every activity of a higher education institution puts special emphasis on IT services in emergency situations. This paper outlines an evolution of thinking regarding the role of ITS in enterprise emergency response.

II. HISTORICAL PERSPECTIVE

Historically, IT organizations did Disaster Recovery (DR) planning and testing based entirely on their own needs for continuity of operations. The major risks were fire, flood, power outage, equipment failure, and human error. Plans were driven by self-preservation from the inside and auditors from the outside. Given these risks and drivers, the responses have tended to be operationally focused: save the data at all costs and be able to restore the data center. On the planning front, auditors have almost universally mandated DR plans, and this mandate usually included testing of these plans and training of technical staff. However, most DR plans tend to be highly localized in scope and very procedural—arranging for varying levels of back-up power, management of back-up tapes with off-site storage, and more recently arranging for re-establishing servers at a remote location.

This historical perspective was one that made sure that the institution was protected in the event of an incident that impairs the machine room of the Computer Center. However, while continuity of IT operations is important for higher education institutions, it is not directly mission-related, per se. The aftermath of 9/11, Katrina, and other regional events, has had big impacts on institutional and IT leadership at many institutions, and the historical view of DR is evolving.

III. NEW PERSPECTIVES ON ROLE OF IT IN DISASTER RECOVERY

First, it is being recognized that the issue is not just one of Disaster Recovery, but more broadly one of Emergency Response. While this shift may appear to be a matter of semantics, it is a recognition that institutions need to respond to issues well beyond the traditional ones of flood, fire, power outage, equipment failure, and human error. The emerging concerns of a pandemic, for example, don't readily fall into those categories. Also, what is needed from ITS is now perceived to be well beyond self-survival and recovery of operations. In an emergency, the ability to communicate—internally and externally—becomes a key service for an organization. The organization's website has become the vehicle of choice for general information regarding status of the situation and tactical issues related to a response. Similarly, email and text messaging are more focused vehicles to tie key personnel together. Thus, while

an organization can tolerate several days of business systems unavailability, communication services must have an instantaneous fail-over capability. Telephony would of course be normally prime amongst such services, but sustainability of the telephone service is beyond the scope of capability for most organizational IT services. Also, Katrina and 9/11 have shown the vulnerability of landline and cellular phone systems in regional disasters. The Internet was designed to be redundant and, if properly conceived and implemented, Internet services are more likely to be sustained in such situations.

Further, in a broad scale or long lasting emergency, the issue is likely to be not about reconstituting business services, but on maintaining the mission activities. Thus for higher education, the focus would be how to preserve the teaching, learning, and research programs. Regarding teaching and learning, online learning—which is an Internet based service in most instances—could be sustained more readily than place based teaching and learning, if the delivery system is designed with potential emergencies in mind. Thus, continuing the academic program in the absence of the ability to meet in traditional classroom settings would become one of proper design of supporting infrastructure and services (an ITS responsibility); having faculty and students prepared to teach and learn online; having academic policies that provide the flexibility to accommodate an emergency switch to online courses; and having access to a portfolio of online courses to meet students' needs during an emergency.

If the emergency is truly long lasting, then online versions of various other institutional services—library, advising, financial aid, student accounts, payroll, benefits, and more will have to be available as well.

IV. DESIGNING FOR EMERGENCIES

As the discussion above shows, organizational processes that have redundancy and/or fail-over capabilities are the ones that can be sustained in the event of an emergency. IT organizations have long worried about designing redundancy and fail-over capabilities into their operations. Academic and research programs typically haven't. Not every region is subject to various natural or human generated disasters. One has to set priorities based on perceived risk. Often implementing an initiative or program requires all of the resources that may be available. Investing in the insurance, for that is what it is, of emergency response alternatives, is generally not in the budget.

All this being said, increasingly IT organizations are discussing so-called "resilient architectures," (i.e., approaches to services) from conception through implementation, take into account the fact that perceived risk factors may make normal service impossible. While disaster recovery has been conceived as a response, resiliency is conceived as much more inherent in the design of the service.

Since online learning is likely to be more sustainable than traditional classroom learning, the resilient approach to sustainability of academic programs would be to build into the normal curriculum the expectation that faculty and students have experience and capability to teach and learn online. Additionally, having a portfolio of core courses that are offered online would allow this offering to be expanded in the event of an emergency.

V. SOME LESSONS LEARNED FROM RECENT EMERGENCIES

• Traditional planning worried about things and business processes. Broad scale emergencies show that one has to focus on people in planning a response. Do people know where to go, what to do, and how to communicate in such an event? If the emergency is long standing, do people know how to continue their work in a new modality?

- Does the institution's administration have plans and has the IT organization operationalized its role if it becomes necessary to create an "administration in exile" when normal facilities are unavailable?
- If your institution doesn't have a crisis but a near-by institution, or the region as a whole, has one, are you prepared to support their needs? Brian Voss of Louisiana State University (LSU) has spoken and written widely about the impact on LSU during Katrina. LSU was largely unscathed, but the campus became an operations center for the National Guard and FEMA. This put huge strain on LSU's facilities and services.

VI. CONCLUSION

Many of the activities in higher education now depend on Information Technology. Thus, at every higher education institution, ITS will perforce play a key role in any Emergency Response plan and implementation. Recent events and possible future events (e.g. a pandemic) have been a wake-up call for institutional leadership and particularly for institutional IT leadership. The scope of emergencies has increased and the understanding of appropriate responses is also changing. IT leaders are recognizing that business continuity means continuity of the enterprise as a whole.

From the perspective of the online learning community, these trends should be good news. Online learning is becoming recognized as a component of a response to large-scale emergencies. Online learning, however, depends significantly on infrastructure architected, implemented, and supported by institutional ITS departments. That the leadership of these departments recognize that continuity of the academic program is in part a component of their responsibility is an important step in the success of such program continuity.

VII. ABOUT THE AUTHOR

Donald Z. Spicer is an ECAR senior fellow, and the CIO and associate vice chancellor for Information Technology for the 13-institution University System of Maryland. He has previous experience as a faculty member and as an academic administrator. He previously held CIO level positions at the University of Notre Dame and Vanderbilt University. He has made contributions to EDUCAUSE, serving as chair of the Current Issues Committee, program chair of the inaugural Mid-Atlantic Regional Conference, and as a member of the Core Data Service Research Task Force and the 2005 Annual Conference Program Committee. His recent publications include a chapter in *The Wired Tower: Perspectives on the Impact of the Internet on Higher Education*.

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OVERCOMING THE FINANCIAL AID BARRIER FOR E-LEARNERS

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ABSTRACT

Financial aid systems help make higher education available to all who can benefit. To "adjust" the existing financial aid system to make it more student friendly and open doors currently closed to many part-time learners and students with the greatest financial challenges, state policy changes and greater private sector initiatives targeted at workforce can use creative strategies, including altering state-based programs, creating new learning tax incentives, coordinating employer-based aid, and distributing aid directly to students.

KEYWORDS

Financial Aid, Part-Time Learners, Policy, State-Based Programs, Tax Incentives, Employer-Based Aid, Direct Distribution

I. INTRODUCTION

Only two decades ago, federal and state financial aid "filled the gap" between a student's (or typically his/her parents) ability to pay and the cost of attending college, particularly for institutions in the public sector. That aid, in an era of traditional-aged, full-time, residential students made sense. It provided the financial wherewithal for a generation of first-time college goers with a pathway to the American dream of a college education. Millions of dollars have become billions, tuition and fees have risen dramatically during the past five years, and debt—significant levels of debt—now burden families and graduates entering the workforce. No longer is indebtedness a feature of graduate or professional students, but now is a burden to a growing number of freshmen. Federal and state financial aid programs no longer fill gaps, but rather provide only a small, and inadequate, "cushion" against financial need. While some would argue the point, we may be seeing the beginning of the end of an egalitarian system of higher education that afforded everyone capable of succeeding the opportunity for a higher education. The irony, of course, is that the same federal financial aid programs that fueled much of the growth in higher education might now be an impediment by failing to adjust to the changing student environment.

More troublesome in the escalating financial aid crisis may be the impact on the growth and evolution of online learning and ALN. While ALN still serves a predominantly traditional student population, it offers greater access to a lifetime of learning and a primary delivery method for the current generation of savvy students who have learned outside the traditional classroom via technology. It is logical to believe that when the current wave of students enter the job market and seek to continue their education, whether to pursue an advanced degree or to seek certification, they will give serious consideration to the convenience of ALN. For some, particularly those attempting to balance work, family and education, the lack of access to financial aid, at least through traditional federal and state sources, becomes a significant barrier. It is a barrier that grows each year, exacerbated by the increasing cost of pursuing a higher education. It must be addressed. It won't be easy.

Online and distance learning has clearly provided greater access for many students, both those pursuing full-time study on campus and, more recently, for working adults and other "non-traditional" learners. Students are older, increasingly more women are participating, and many more students are engaging in learning on a part-time basis. And while working students save money on such items as travel to and from campus and dependent care expenses through online learning, the greatest benefit is not having to resign one's job and lose a source of income or completely relocate in order to pursue higher education. But actual tuition and related equipment costs for distance learning programs may, in fact, be higher than oncampus courses. Computers, Internet access and "technology" fees are often added to the price of online courses. Ironically, these added expenses create problems for the students who could most benefit from online courses.

Despite overwhelming data suggesting that most students now work while attending college (75%) and the number of traditional-aged full-time in-residence students continues to decline, the current financial aid "system" serves, almost exclusively, the remaining 25% of the student population. Moreover, most colleges and universities now depend on this federal and state financial aid "system" to support their full-time, campus-based students, rejecting any and all efforts to provide support for part-time and online learners. Little aid is available to the distance learner, and even less if the student is not enrolled half-time or admitted to a degree program. Financial aid mechanisms, established over the past 40 years and designed to expand access, often limit aid for students who are the neediest. Structures, policies, procedures and practice have become real barriers to getting aid to the fastest growing population of students in U.S. higher education. These barriers, many engrained in federal, state and institutional policy, will not be easily removed, if even adjusted in any significant way.

Three years ago, the Southern Regional Education Board's Distance Learning Policy Laboratory issued a report on the impending financial aid crisis for distance learners. The report targeted action in the then upcoming Reauthorization of the Higher Education Act. That target has proven elusive as there is still no immediate timetable for action by the U.S. Congress in 2005. Further, despite efforts by many to influence significant changes in current federal financial aid programming, including the 2000 Web-Based Commission Report and the results of the U.S. Department of Education's Distance Education Demonstration Projects, most Washington insiders suggest only minor changes, if any, should be expected. It seems clear that change, significant policy change at the federal level, is highly unlikely.

II. SOME ALTERNATIVE APPROACHES

In the aforementioned SREB report, principles to guide the future development of financial aid to support distance learners were suggested. The principles included:

- The broader and fundamental goal of financial aid systems at all levels is to make higher education available to all who can benefit and to remove or lessen financial hurdles to such access.
- Any financial aid system must be fair and reasonable to all learners. Financial aid policy should encompass a broader definition of "student learner" than the current traditional classifications.
- With learning no longer confined to a campus setting in face-to-face classrooms or in defined blocks of time, policy built around that model is fundamentally flawed.
- Students are increasingly learning in part-time, extended and contracted time formats and these
 new learning arrangements should not penalize or exclude participating learners from access to
 financial aid.
- Financial aid systems must become more student-centric and responsive to how, where, and when students learn.

• Appropriate accountability mechanisms to prevent fraud and abuse must be maintained.

These principles, certainly not radical, might have a chance to be implemented at the state level or through state efforts to encourage changes in support for distance learners. Four specific initiatives are suggested.

A. Altering State-Based Programs

States generally provide financial aid for a variety of purposes beyond those of the federal system, including need-based programs and a growing number of programs for academically talented students. Georgia's HOPE scholarship, established in 1993 is one example of a program designed to both reward talented students and to keep the state's brightest at home. The merit-based program has been successful and has been replicated in a number of states across the country. Those programs can be adjusted to accommodate distance learners, part-time adult learners, or other groups of students with limited financial aid support. One model that holds promise is Vermont's "Non-Degree Grant" program that provides direct state financial aid to Vermont residents to cover tuition and fee costs. Coursework can be taken from a variety of course providers, including colleges and universities, technical centers, private training organizations and high schools. Support is provided for coursework designed to improve employment skills or to be a "stepping stone" to pursuing a degree. Unlike other federal and state programs that require a student be formally admitted and enrolled in a degree program and making "satisfactory progress," this program invests state dollars in citizens and "kick starts" their educational efforts. This initiative, part of a broader effort by that state to support adult learners, is commendable.

B. Creating New Learning Tax Incentives

Another approach is for states to offer incentives such as tax credits to employers to encourage and support employee educational initiatives. Education is good for individuals and for business. Distance learning has the added benefit of allowing workers to better balance work, family and educational responsibilities and may permit them to stay on the job while pursuing studies. The broader community and social benefits offer real value as well: research indicates that individuals with more education are more apt to vote, are less likely to be incarcerated, are more likely to volunteer and contribute more to the tax base. The investment made is returned in multiple ways. Further, incentives to participate in distance learning will support skills learned by participating in online learning to the work environment. While many older students are leery of and at times intimidated by the online environment, some research is suggesting that these same students are being empowered by gaining familiarity with technology and that it is having a positive affect on job performance. Kentucky created a tax incentive for employers to encourage more adults to complete GED programs and enter postsecondary education (including the Kentucky Virtual University), but the program was slowed by "red tape" and it being retooled. Still, it holds promise as a strategy to encourage educational pursuits for many workers.

C. Coordinating Employer-based Aid

A related effort that has emerged over the past decade is employer-financed education—an increasing trend as learning has became more mobile, initially through branch campuses and off-campus centers and more recently via various technology. Employer-supported education is often focused on specific skills applicable to the job rather than broader degree goals of the individual, although many employers support both. The changing nature of work results in outdated skills. Employers who recognize that human resource development is the key to competitive advantage are more likely to support tuition reimbursement. Some find it is often easier and less expensive to outsource the training to a college or university and subsidize worker (student) participation in these programs. Data show that rather than

losing employees once they complete certificate and degree programs, employees are actually more likely to stay with the company that subsidizes their education. An organization benefits by saving money by not having to develop the curriculum, by reducing turnover and by developing workplace skills necessary to meet its performance goals.

With more companies desirous of recruiting and retaining their workforce, more have enticed employees to pursue part-time studies while working. The recent emergence of IT certifications is an example of this—companies have spent huge sums of money supporting their employees to secure various IT network and system certifications. While not financial aid in the traditional sense, employers, as part of work compensation packages, have provided support for up to the entire cost of tuition and fees (or perhaps some percentage based upon factors such as the grade earned in a course), thereby investing in their employees. Employer-based support continues to grow, effectively making higher education a "nocost" or "low-cost" fringe benefit for some employees. The IRS allows public and private employers to provide up to \$5,250 per year to each employee in a tax-free reimbursement for educational expenses and is another powerful tool to support employer-based efforts. Too few individuals and businesses know about this program and therefore many fail to take advantage of it.

D. Direct Aid Distribution to Students

Without question the most radical proposal is not a new idea, but one that has gained little support from most traditional colleges and universities, for obvious reasons: distributing aid directly to the student. Establishing direct aid to students, more often seen in private scholarship programs, could provide new options for learners to utilize assistance as they deem appropriate (as is the case in the Vermont program referenced earlier). Such an approach could simplify the aid process and address challenges and problems relating to time, cost of education and other regulations that are part of more traditional aid programs that simply don't work for many part-time and e-learners. Appropriate oversight mechanisms would need to be developed to protect against fraudulent practices and the problems of tracking progress and the use of aid proceeds. A challenge might be how to scale such efforts. Still, targeting support to assist learners through direct financial grants can encourage more participation. States might use such a program to engage more students in areas where there are shortages (e.g. teaching) and where they can utilize workforce development agencies/offices and work with local communities. These grants could then be "forgiven" for students who work in targeted disciplines, specific job categories or in designated geographic areas.

III. A TIME TO ACT

Now is the time for creative strategies and bold initiatives to "adjust" the existing financial aid system to make it more student friendly, to extend and encourage greater participation for "nontraditional" students and to support the growing use of technology for providing higher education. Absent major federal changes, highly unlikely in the short term, encouraging state policy changes and greater private sector initiatives targeted at workforce needs may be a realistic option. Removing financial barriers through new financial aid "vehicles" will open doors currently closed to many part-time learners and students with the greatest financial challenges.

IV. ABOUT THE AUTHOR

Bruce Chaloux directs the 16-state Electronic Campus initiative of the Southern Regional Education Board. The Electronic Campus, the South's "electronic marketplace" for distance education courses and programs, has grown to include over 7,000 courses and 250 degree programs from more than 325 colleges

and universities in the region. He also directs a FIPSE LAAP grant focusing on distance learning policy (SREB's Distance Learning Policy Laboratory).

Prior to assuming his duties at the SREB, he served in the Graduate School at Virginia Tech for 13 years, including nine years as Associate Dean and Director of Tech's Northern Virginia Graduate Campus and four years as Associate Dean for Extended Campus Programs in Blacksburg.

Dr. Chaloux has nearly 30 years of teaching and administrative experience in higher education at the institutional, state, and national levels. He taught an occasional graduate course and directed six doctoral students while at Virginia Tech, served as a faculty member in Business and later as Associate Dean and Dean for Academic Affairs at Castleton State College in his native state of Vermont, was a staff member with Virginia's Council of Higher Education, and was Dean in Residence with the Council of Graduate Schools while on sabbatical from Virginia Tech in 1993–4.

His numerous professional assignments and activities include direction of a national project on the assessment of telecommunications (Project ALLTEL) in the mid-1980's, chair of the Southern Association of Colleges and Schools Committee on Distance Learning and the Council of Graduate School's Distance Learning Task Force, and serving on the Council for Academic Management for the eArmy U initiative in addition to service on advisory boards, task forces and projects focusing on elearning.

TUITION/PRICING FOR ONLINE LEARNING

Karen Paulson

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ABSTRACT

To make online learning an integral part of higher education, institutions must determine the real costs of instruction and what tuition to charge based on these costs. Then the question is: Is this tuition bearable by the target population of potential students?

KEYWORDS

Instructional Costs, Pricing, In-State and Out-Of-State Electronic Rates, Single and Differential Tuition Rates, Discounts, Workforce

I. INTRODUCTION

There are two primary methods for incorporating online learning into the fabric of postsecondary education: 1) online learning as separate activity; or 2) online learning as an integral and accepted aspect of "business as usual." This paper takes the position that online learning is and should be "business as usual." Therefore, it does not address:

- How to determine the relative cost of technology-enhanced or technology-based instruction, although it is important to know this. For good techniques on how to do this see the work of the National Center for Academic Transformation (<u>www.center.rpi.edu</u>) and the Technology Costing Methodology Project of the Western Cooperative for Educational Telecommunications (www.wcet.info/services/tcm).
- The argument that technology should be considered part of the infrastructure of an institution—here we *assume* that technology's provision, upkeep, and refreshment are included—and that there are no hidden costs, although (again) it is important to have made this case and prevailed at the institutional and state levels. For supportive material on this topic see *Using Finance Policy to Reduce Barriers to Distance Learning*, by the Southern Regional Education Board, August 2002 [1].

Starting from this premise—of online learning as an integral part of higher education's business as usual—this paper envisions a future in which online learning, blended learning, and face-to-face learning co-exist equitably within institutions and state systems of higher education. We now turn to the question of cost and tuition when online learning and the rest of higher education are fully integrated.

II. BOTTOM LINE INSTRUCTIONAL COSTS

The real cost of instruction at institutions—all undergraduate instruction including all forms of delivery—must be determined (note: specifically not delineated by delivery method). To do so all costs and activities need to be unbundled and understood in their entirety. At the same time, it is important to get a clear picture of the sources of revenue that cover these costs—tuition, state support, and the exploding number of special purpose fees.

When costs and activities are unbundled [2, 3], instructional costs include the following types of

expenses:

- Instructor(s) salary and compensation
- Infrastructure costs (for face-to-face classes such items include light and heat for classrooms, for online education it includes electronic networks and course management system costs)
- Academic advising costs
- Curriculum development and refreshment costs (these are usually seen as a big expense for online courses, which it can be initially; however, if all courses (online and face-to-face) were to be rigorously and continuously refined to incorporate the best pedagogical techniques, much more money would be budgeted here for *all* forms of instruction not simply online learning)
- Delivery costs (for instance for face-to-face instruction at remote locations the costs for transporting instructors to meet with students, for online education it might include any per student costs for course management systems)
- Student academic support services (access to library, tutors, etc.)
- Administrative costs in support of undergraduate instruction (such as the president's salary, etc.)

Note that instruction and student services are usually the most expensive aspects of higher education. This holistic approach to calculating the real cost of undergraduate instruction will not result in a lower or reduced cost. In fact, it will likely alarm many people when they see what the actual cost of undergraduate instruction really is; nevertheless, without understanding total costs there is no basis—other than pure market—for establishing price (the tuition that students are asked to pay). Armed with the "new" bottom line for instructional costs at an institution or for a state system of higher education, we turn to what tuition to charge students.

III. IN-STATE, OUT-OF-STATE, ELECTRONIC RATE?

A question posed about tuition for online learning is: should the institution charge in-state, out-of-state, or some in-between level of tuition? The differential of in-state and out-of-state tuition for traditional postsecondary education arises from the assumption that tax-paying citizens of the state are already subsidizing public higher education through tax-supported allocations to institutions; therefore, they should carry less of the tuition burden compared to out-of-state students who presumably did not pay any taxes in the state.

Due to the ad hoc methods that some institutions have used for setting tuition, particularly for online learning, the price differences that exist confuse many students. In some cases, on-campus, in-state students must pay out-of-state tuition to take one or two online courses, even though the bulk of the student's courses are taught in a face-to-face classroom. It does not make sense to students or their parents, or even often to faculty and administrators. These price differentials are a function of old pricing practices being awkwardly adapted to new delivery modes instead of fundamentally rethinking how tuition is charged for the entire higher education enterprise.

As state support for higher education decreases, it becomes increasingly of interest why a differential tuition is still charged. One reason is because out-of-state tuition is largely "gravy" in institutional coffers. Another reason is history and that people understand the difference between in-state and out-of-state tuitions. And yet, perhaps the most compelling reason is that although state support has indeed declined, tuition still is a substantial portion (approximately 40 to 50%) of all undergraduate instructional costs (when athletics, other auxiliary activities and research are excluded).

This paper presents two scenarios: 1) a single tuition rate for all undergraduate students that does not rely

on differentials; and 2) differential tuition based on selected student characteristics used consistently across delivery modes.

A. Single Tuition Rate

Using the true costs of undergraduate instruction (based on the inclusion of infrastructure for all forms of delivery), a single tuition might be charged to all students—in-state, out-of-state, online, or face-to-face. This method would be analogous to private institutions that charge a single price to students, or the "erate" advocated by SREB. Currently out-of-state students pay two to four times what in-state students do on a typical public university campus. Therefore, to envision a tuition rate between what in-state and out-of-state students pay, it would likely be one and a half times of what the current in-state tuition is.

Pros: This approach is simple and easily understood. It allows for incorporation of market forces. It shifts the focus of policymaking away from pricing discussions to discounting decisions, forcing attention to ways in which public funds are used to "buy down" tuition in the marketplace.

Cons: The single tuition rate could penalize in-state students because they are already supporting the institution through the tax structure if discounting mechanisms are not in place. The single tuition rate will likely be higher than current in-state rates because of the need to incorporate not only all delivery methods but all students and to recover the actual costs of undergraduate instruction. Another issue is that the single tuition rate does not allow for as much flexibility as is needed for the different policy environments in each of the fifty United States.

B. Differential Tuition Based on Student Characteristics

Another possibility would be to charge differential tuition but base it on the newly calculated true costs of undergraduate instruction (based on the inclusion of infrastructure for all forms of delivery). The student characteristics for this differential tuition might be:

- 1. In-State
- 2. Out-of-State, On-Campus
- 3. Out-of-State, Off-Campus

Pros: This approach is easier to understand than the current array of tuition. It is also more rational than how many institutions approach tuition for online learning and would more easily be adapted from current policies.

Cons: This version still differentiates tuition based on geography which many people think to be the antithesis of online learning.

IV. ARE THESE COSTS BEARABLE?

After determining what the real costs of instruction are and what tuition to charge based on these costs, then the question is: is this tuition bearable by the target population of potential students? Generally, MBA programs charge more than programs for, say, family financial planning degrees because the students pursuing MBAs are able to comfortably bear the cost either due to their personal financial situation or because educational costs are borne by their employers.

One method for making costs bearable is to "buy down" from the set tuition. This "Miami of Ohio"

method—to charge full cost with differential deductions—is of interest to many in higher education. Then, depending on the needs of the various constituencies, the tuition can be discounted or targeted financial aid can be awarded to offset the real cost of instruction. Who should do the discounting or buying down? Three entities are of primary importance here. The state would want to give discounts to students pursuing degrees that are needed in the state, for instance teacher education graduates. The institution itself may have an interest in affecting students' behavior in some cases such as Oregon State did when they charged a lower tuition for courses offered at unpopular times (early morning and evening courses); it might be that rather than starting new building construction, enrollments are encouraged in blended or online courses. And, finally, sometimes even the department might be the entity which gives the discount as some Human Sciences departments do in the Great Plain Interactive Distance Education Alliance because it is a part of their land grant mission to support county extension work in the states. Note that the discount is real money and must be recovered from real budget lines. The ability to buy down or discount is particularly attractive because of its flexibility, especially when buying down from a set tuition based on the actual cost of undergraduate instruction.

V. SLOAN-C'S PILLARS OF SUCCESS

How do these scenarios fit with Sloan-C's Pillars of Success for online learning?

Learning Effectiveness: Nothing in these scenarios precludes the importance of learning effectiveness. Indeed, it is hoped that by explicitly including curriculum development costs in calculating the cost of undergraduate instruction that its importance will be highlighted. And, by basing tuition on the full cost of undergraduate instruction, it might shorten time to degree by motivating students to finish once they become aware of the real costs of attending college.

Student Satisfaction: A result of moving to either a single tuition rate or a clearer use of in-state/out-of-state, on-campus/out-of-state, off campus characteristics would be less misunderstanding of tuition on the part of students and families.

Faculty Satisfaction: Unbundling the cost of instruction for all forms of delivery (online, face-to-face, blended) would emphasize the importance of all activities for all forms of delivery (particularly in curriculum development and refinement). Furthermore, instructional salaries and compensation would be more explicit for all types of courses rather than being a hodge-podge based on whether courses taught were in-load or out-of-load, or using different delivery modes.

Cost Effectiveness: By more explicitly citing instructional costs of all forms of delivery as the total approach of an institution, it might encourage institutions to streamline activities and look for efficiencies rather than re-creating either structures or infrastructure for separate institutional functions. It eliminates the online as "other" nature of higher education.

Accessibility: The ability to more clearly see the "buy down" or discount needed to real costs in order to encourage students to either enroll in particular types of courses or in particular types of degrees would have utility.

VI. CONCLUSION

These ideas of fundamentally changing higher education's approach to cost and tuition for undergraduate

education include:

- Calculating the real costs of undergraduate instruction incorporating all modes of delivery
- New tuition possibilities
 - o A single tuition rate
 - o Differential tuition based on student characteristics
- "Buying down" or discounting based on market, state, institutional, departmental needs

The Sloan Consortium might consider making the case for why institutions and states should pursue these options, particularly as higher education moves forward toward making online learning part of "business as usual."

VII. ABOUT THE AUTHOR

Karen Paulson began work at the National Center for Higher Education Management Systems as a Staff Associate in October, 1996. Prior to joining NCHEMS, she worked at the Center for the Study of Higher Education, Penn State University. At CSHE she was a member of the Evaluation Team for the NSF-funded ECSEL Engineering Education Coalition, a consortium of seven engineering institutions, since its inception in 1990. While at Penn State, she was also a member of the Steering Team for the Schreyer Institute for Innovation in Learning, an organization working toward infusing active and collaborative learning throughout undergraduate curricula.

Before moving to Pennsylvania, Karen was a Program and Policy Analyst in Academic Policy Analysis at the University of Illinois. Her education includes a B.S. in Ceramic Engineering with a minor in Bioengineering and two M.S. degrees in Metallurgical Engineering and Higher Education Administration all from the University of Illinois at Urbana-Champaign and a Ph.D. in Higher Education with a minor in Policy Analysis from Penn State University.

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STUDENT LEARNING AND STUDENT SERVICES: POLICY ISSUES

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I. INTRODUCTION

An increasing number of students in the United States are involved in online education, according to research by the Sloan Foundation. By fall 2004, approximately 2.6 million students were estimated to be enrolled in at least one online course, an average growth rate of 24.8% from 2003–04; this figure represents a 5% increase over the 2002–03 growth rate [1]. The consequence of this continuing expansion of the e-learning population is that policies with respect to student learning/academic programs will need to be updated or developed; and policies and practices with respect to existing student services, which often provide different support for onsite and distance students or minimize online services, will need to fit the realities of online learning. Given the technological world of the 21st century, it would behoove institutions if such policies applied to all students and services were online.

What are the student areas which require policies for online learning to be effective? Issues in four areas seem to dominate: student learning, student services, 24/7 support and outsourcing, and multi-campus/system alignment. Each points to several policy issues, often inter-linked, that need discussion, decisions and implementation practices [2]. The discussion below does not make a distinction between fully online or blended courses, unless noted.

II. POLICY ISSUES

A. Student Learning: Academic Program Issues

As student enrollment increases, a key academic issue is whether the institution or department will offer individual courses, programs or complete degrees in online or blended formats. While many schools do offer total degrees, others currently debate the course or program issue [3]. The consequence of this decision impacts the entire university structure and operations and the extent of its commitment: technology support, library resources, faculty development, teaching load and promotion, administrative support for the online enterprise, course evaluations, student and faculty services, whether services are 24/7 or time limited, and so on—all of which affect institutional planning and budgets. Similarly, a determination has to be made whether there will be a differential fee structure for onsite, online or blended courses. The outcome will reveal how the institution sees itself within higher education in this decade and beyond; for what roles do they believe students should be prepared and how should the enterprise be organized to support those roles?

Several other areas affected by the above decision—the extent to which the academic program offerings are onsite, online or blended learning—are course load limits, course evaluations, examinations for off-campus students, and student technology expectations.

1. Course Load

The issue here is whether course load limitations should be related to mode of learning: is there a maximum load for an online student? Is the issue the online coursework or the student's full time versus part-time status? Should the decision be different for online and onsite courses?

For example, students at Washington State University's (WSU) distance degree program (DDP) must have an advisor's clearance to register each semester. Thus, students with 12 or more credits must have completed at least 50% of their coursework and students with less than 12 credits must have completed at least 25% of their coursework in order to be cleared. The purpose is to assure that students keep their financial aide and make progress towards their degree [4, 5].

2. Course Evaluations

What policies govern course evaluations at the institution? How do online/ distance students obtain the evaluation materials and provide feedback? At the University of Maryland University College (UMUC), distance course evaluations are online and students are electronically prompted to complete the instrument one month before the end of the semester. Response rates are very high because the UMUC policy requires that all students respond or they cannot re-enter the online class; the software allows students to select the option "no response" when the evaluation pops up. At WSU, evaluations are also online; however, response rates depend on the ability of faculty to persuade students to complete the instrument. A related issue is the policy about evaluation standardization: is there a departmental evaluation (i.e., WSU) or institution-wide (i.e., UMUC), or another model? Do students in blended courses use the onsite or online evaluations?

3. Examinations

Since distance students are not on-campus for exams, another policy issue involves off-site examinations. Who decides: the individual faculty member, the department, university-wide policy? These decisions must lead to clear procedures involving whether these are to be online, timed exams or proctored. If the latter, then items such as identifying proctors, locations, and deadlines must be transparent, user-friendly, and interactive [6]. It should be noted that off-campus examinations are likely not an issue for blended courses.

4. Student Technology Skills and Expectations

The policy requirement here is for a clear standard that specifies the minimum expected technical skills and competencies of the students as well as the required hardware and software for the learning environment. In addition, the extent of multi-media in courses has become an issue in some institutions, because many students still have dial-up service and media takes a long time to load or may be costly. Policies about expected skill levels and the minimum speeds reflect not only the university's decisions about the extent of technology-linked learning, but also impact the flexibility in course design. Given the continuing advancements in technology, how might the institution facilitate high speed access; what policies might support access to free or discount WiFi services?

B. Student Services Issues

The realm of student services may include administrative areas such as registration, admissions, and student accounts that enable students to get into a course, as well as academic support once a person is enrolled such as advisement, library resources, text purchases, technical support and so on. The WCET-LAAP project, which developed guidelines and tools for web-based services, drew the following, all

encompassing, web of services graphic [7]:

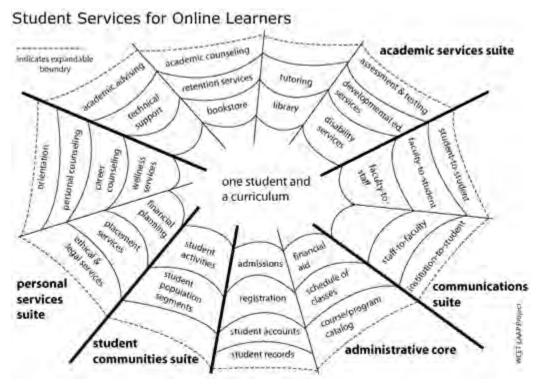


Figure 1. WCET-LAAP Project

In general, student services that support the online learner require policies that identify which services are online, whether they are available to all students or only those in online courses and whether the service is accessible 24/7. Thereafter it is important to clarify the procedures and clearly communicate and update the information. The WCET graphic, above, identifies a global (ideal?) system that covers all aspects of a student's life with the academic institution. Processes such as application, course registration, financial aid, drop/add, and class schedules are a reflection of services in the administrative core that are usually available online to all students.

The discussion below will focus on three specific areas in the academic services suite—advisement; library and information resources; technical support—which have come up most frequently in discussions with student services professionals and which may not be available online or only available to online students.

1. Advisement

A policy to provide online advisement requires staff training in both counseling and technology. This means that advisors have to be comfortable with distance communication, with technological multitasking, and with both synchronous and asynchronous relationship management. Since many counseling programs do not offer this perspective, it becomes incumbent upon the institution to hire and train advisors who can excel in these functions. Moreover, students in blended coursework may need both options—online and onsite—which requires the ability to toggle back and forth. A related challenge is the need to integrate new technologies to automate routine tasks and do the time consuming activities, thus enabling the advising staff to offer "the more valuable 'high-touch' service students prefer" [7].

2. Information and Library Resources

The ability to obtain and access the resources that are critical for quality academic learning without limitation of time or place requires a policy that identifies the extent of the institution's commitment: how much of the resources will be online and with what depth? What proportion will be full-text? What range of resources are available—e-books, journal articles, databases? Increasingly, the need is to have online databases with full-text articles, e-books, online tutorials, and help from librarians. Related to the resource and access issue is the extent to which student assistance by librarians and tutorials will be supported. At UMUC, for example, personal library assistance is available 24/7, both synchronously and asynchronously, via phone, chat or email [8]. Once again, the issue is whether these resources will be available to all students or only those in online coursework.

3. Technology and Technical Support

Without the technology infrastructure none of the online programs and services can exist, as we know. Policy issues involve questions related to the learning process, such as determining which learning management system(s) will be available; will the university have one system or will departments have independent choices? Which administrative process, will be done online, i.e., registration, drop-add, bill payment and so on? How much computer lab support will be available, for both onsite and blended students (who may not bring their computers to campus)? At the University of Maine, a related issue arose: the need for new refund policies due to technical problems such as inaccessibility or problems getting a password [3]. Moreover, the potential for anytime, anywhere learning leads to additional policy decisions: will assistance be available in real time or asynchronously? Will assistance be 24/7 or specific times? Decisions about where responsibility for technology and the support lies within the university structure, and its breadth and depth, reflect the perceived importance of this issue.

C. Should Services be 24/7? Should Services be Provided In-house?

The ability to provide academic programs and support for online learners is closely related to two policy issues: whether services should be available 24/7 or for specific hours; and whether the services should be provided in-house or out-sourced. These issues often arose first with the need to provide technical assistance, then moved to areas such as tutoring, book purchasing and now arise in discussions about first-line advising. The decision with respect to 24/7 assistance requires that institutions identify their students' needs and the support areas involved. How that support will be managed, in-house or by and external organization, involves considerations about finding the qualified staff to provide the support, whether the institution wants to be involved in the management details and how the needs match budgetary considerations. If the support is out-sourced, training the external provider in the culture and details of the organization must be done. UMUC, for example, provides 24/7 USA-wide email, phone, and chat support for the learning management system by using an outside company. UMUC's library services provide similar personal help via a librarian support company. Some universities use a tutoring provider, such as Smarthinking.com, to provide assistance in basic areas such as math, accounting, economics, and Spanish. Many institutions now use a company such as MBS Direct to handle all book orders. The trend towards outsourcing support functions may be one of the more striking developments in higher education.

D. Communication Issues

Given the need for speedy and accurate communication about academic programs and student services, policy decisions about where the communication responsibilities lie are needed. For example, an

interactive, easily navigable website is critical. Moreover, communication does not need to be only passive, waiting for students to ask for information. The WCET report notes that the use of 'push and pull' technologies can enable students to 'pull' the information they need, while allowing the institution to 'push' reminders about deadlines and services [7]. Oblinger and Skinner [9] identify several guiding questions about services: are they "available to users at any time, wherever they are? Is the service available in real time? Do the offerings and services 'learn' from interaction with users? Do the offerings and services anticipate the needs of users?" Another resource is an online handbook. How the communication is managed, updated, structured, and interactive requires a policy about communication management.

E. Multi-campus/ System Issues

The above issues deal with intra-institutional policies and practices. In cases of a multi-campus system, inter-institutional issues are involved. At Washington State University, for example, system funding for distance courses is affected by which campus is the student's home base; at the University of Maine System, residency at the student's home campus (last 30 credits) is still an issue; in some systems, policies for transferring credits among campus schools with facility and clarity are not in place, thus affecting degree completions; and decisions about fees for distance courses whether taken by residents or non-residents need to be consistent within a system. It is imperative that governing boards foster fluidity and strong alignment among campuses, or students will face barriers to completing their education.

III. CONCLUSION

There are four broad policy issues that affect online student learning and student services within an institution: whether online/ blended academic offerings will be individual courses, programs or degrees; whether online services will be available only to distance students or to everyone; whether the services will be available 24/7 or at specified hours, in house or by an external company; and whether there will be a differential fee structure for distance and onsite coursework. With respect to multi-campus/system alignment issues, questions about residency, ease of transferability, and fees and campus pay-backs need to be addressed quickly. The responses to these questions will reveal how the institution sees itself and its role in higher education in the decades to come.

IV. ABOUT THE AUTHOR

Claudine SchWeber, Ph.D. is Chair of the Doctor of Management Program at the University of Maryland University College (UMUC) and Collegiate Professor. Previously she was Associate Provost for Distance Education and Lifelong Learning at UMUC. Dr. SchWeber has written and made many presentations about varied issues in online learning in the United States and abroad. She was a Fulbright Fellow to Israel focusing on e-learning and its challenges.

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ASYNCHRONOUS LEARNING NETWORKS: POLICY IMPLICATIONS FOR MINORITY SERVING INSTITUTIONS AND FOR LEADERS ADDRESSING NEEDS OF MINORITY LEARNERS

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"What can happen is a decline in our standard of living, if more Americans are not empowered and educated to participate in a world where all the knowledge centers are being connected. We have within our society all the ingredients for American individuals to thrive in this world, but if we squander those ingredients, we will stagnate."

Thomas L. Friedman

ABSTRACT

For minority serving institutions, policies that support learners call for decisions about equity, quality, cost, impact on national economic performance and international global relationships.

KEYWORDS

National and State Policies, MSIs and Minority Learners, Multicultural Organizational Framework

I. INTRODUCTION

Changing U.S. demographics and globalization factors of the type described by Thomas Friedman in *The World Is Flat* (rapidly expanding technology infrastructure, politics, innovation) [1] are creating the environment within which policies in this country and around the world are and will be developed well into the first 25 years of the century. This paper is focused on the Minority Serving Institutions including formally designated MSIs as well as other public and private institutions desiring to provide online learning opportunities for diverse audiences. Policy choices involve decisions about equity, quality, cost, impact on national economic performance and international global relationships.

College attendance in the United States has grown rapidly over the past 40 years with ever increasing student aspirations. Ninety percent of today's high school students hope to attend college [2]. As attendance rates have risen, so has the diversity of the student body. Minorities now comprise twenty-eight percent of college students although some groups are still underrepresented. Fifty-eight percent of bachelor's degree recipients attend two or more colleges. Twenty-eight percent of undergraduates attend part-time and seventy-three percent are non-traditional students. By 2015, one to two million additional young adults will seek access to college, many from low income and minority families. (It should be noted in this introduction that minority and low income, while sometimes correlated, are not the same. Also, minority learners come from many socio-economic backgrounds and circumstances and are found distributed across the performance curve.) Today the national expectation standard is no longer high school education, but college education for all. Research confirms that in all settings whether urban, rural

or suburban, persistence, good teaching and an environment of great expectations elicit better performance from all students.

II. "WHEN MUCH IS EXPECTED MUCH IS ACHIEVED"

Minority Serving Institutions (MSIs) currently educate approximately 35% of the U.S. minority population. These institutions are a critically important doorway to higher education. They are less than 3% of the nation's two and four-year institutions. Historically Black Colleges and Universities produce 28% of all bachelor's degrees, 15% of all master's degrees and 17% of all first professional degrees earned by African Americans.

Some key historical factors that have led to the U.S. reaching near universal college attendance:

- Between 1960 and 2001 college enrollments expanded from 4.1 million to 14.8 million.
- During the same time period there was a 57% population increase and the baby boomers came of age.
- State and university systems grew adding 743 community colleges.
- The GI Bill educated 6.3 million veterans.
- The Economic Opportunity Act of 1964 established Work-Study.
- There was a three-fold increase in federal support for higher education (loans, grants, teacher training, infrastructure).
- The focus on women's rights and Title IX changed the gender balance.
- New opportunities in distance education and a job market requiring higher levels of education to use technology and information became increasingly diverse toward college education and lifelong learning.

III. WHAT IS A MINORITY SERVING INSTITUTION?

While nearly all public and private higher education institutions serve minority populations to a greater or lesser degree, The Higher Education Act of 1965 gave special recognition to some postsecondary schools that serve a high percentage of minority students as Minority Serving Institutions (MSIs).

IV. HISTORICALLY BLACK COLLEGES AND UNIVERSITIES (HBCUS)

Today there are 105 Historically Black Colleges and Universities (HBCUs). Forty are public four-year; 49 are private four-year; 11 are two-year public and 5 are two-year private institutions. The majority of the HBCUs are in the south: Alabama (15); Arkansas (4); District of Columbia (2); Delaware (1); Florida (4); Georgia (10); Kentucky (1); Louisiana (6); Maryland (4); Mississippi (8); Missouri (2); North Carolina (11); Ohio (2); Pennsylvania (2); South Carolina (8); Tennessee (6); Texas (9); Virginia (5); West Virginia (2); U.S. Virgin Islands (1). The 1890 Morrill Act created black land-grant colleges and universities and today there are 17 public land grants including Tuskegee, a private state-related institution. The University of the District of Columbia (UDC) and the University of the Virgin Islands were established under the 1862 Morrill Act. UDC, along with Howard University, are two of the largest MSIs. Forty percent of all students in four-year HBCUs are in black land grants. Eight of the black land grants offer Ph.D.s and Florida A&M, Tennessee State and Southern University (LA) are three of the

top five black institutions producing African American Ph.D.s. It is currently estimated that HBCUs serve approximately 285,000 students (Sloan Survey). The HBCUs collaborate in a number of ways including work through the National Association of State Universities and Land Grant Colleges (NASULGC) and NAFEO. Increasingly, all MSIs are working together under an umbrella of diversity.

V. TRIBAL COLLEGES AND UNIVERSITIES (TCUS)

Today there are thirty-three Tribal Colleges and Universities that are included in the White House Initiative on TCUs. All of these institutions are designated as 1994 land-grant institutions receiving support from the U.S. Department of Agriculture and the Bureau of Indian Affairs. They are located in ten states: Arizona (2); Kansas (1); Michigan (3); Minnesota (4); Montana (7); Nebraska (2); New Mexico (3); North Dakota (5); South Dakota (3); Washington State (1); Wisconsin (2). (D.Q. College in California was recently closed.) One hundred percent of these institutions are public and they currently serve approximately 30,000 students (2004). Tribal colleges share missions of preservation of language and culture and are primarily chartered by tribal governments and receive their base funding from congressional legislation never fully funded. They have never received the authorized level and are generally severely under funded. TCUs play a major role in local communities [3]. Most of these institutions are two-year colleges serving an average of 467 students, many of whom are single, reservation-based women with children.

Technological advances are only slowly evolving on rural reservations and a large digital divide continues. A recent FCC report noted that reservation based Indian populations and K–12 schools on these reservations frequently are not connected to the Internet, telephone penetration is much lower than the rest of the country [4] and while the TCUs generally have well-equipped computer networked laboratory facilities, the divide perpetuates the isolation of tribes and serves as a deterrent to needed educational economic development. The work of two National Science Foundation supported projects, one managed by EDUCAUSE and one by ADEC, found that there are a variety of barriers slowing the development of technology and the opportunities for distance education on reservations: 1) distrust of new technologies; 2) remote geographic location; 3) weak tribal economies; 4) lack of government policies targeted to improving technological infrastructure and online teaching and learning capacity; 5) lack of property rights for American Indian intellectual property shared on the Internet.

Generally, the educational attainment level of American Indians has been lower than any other ethnic or racial minority in the U.S. The American Indian Higher Education Consortium (AIHEC) has historically provided national leadership to advance the work of these colleges. Eighty-five percent of students attending tribal colleges are American Indian/Alaska Native [5]. Approximately 8% of all American Indian/Alaska Native students are enrolled in tribal colleges. The students attending TCUs are more likely to be from lower socio-economic levels than students enrolled in other types of postsecondary institutions. Eighty-five percent of tribal college students have incomes below the poverty level for a family of four. The percent of tribal college students receiving Pell grant funds (60%) is more than double that of students attending non-minority serving institutions (24%)[5].

Tribal colleges are beginning to see distance education as an opportunity, and are developing and implementing online distance education courses and, in a few cases, degree programs for their students. Of all MSIs, Tribal Colleges offer the fewest online courses[5]. Some tribal leaders may not see the opportunities that might be possible if TCUs were to partner with other TCUs and the broader set of landgrant institutions in the country. Administration and faculty retention is difficult, particularly at the more remote institutions, and ADEC is currently working with a number of these colleges to help determine how they might both offer and take academically and culturally appropriate educational programs.

VI. HISPANIC SERVING INSTITUTIONS (HSIS)

There are currently 335 HSIs including 46 public, 23 private nonprofit and 32 private for-profit. Federal statute defines HSIs as institutions that have at least a 25% Hispanic undergraduate (FTE) enrollment, with at least 50% of its Hispanic students coming from low-income background and being first generation in their family to attend college and an additional 25% being low income or first generation. They are eligible for Title V grants from the Department of Education. Various organizations count Hispanic/Latino enrollment numbers differently, but by all definitions urban areas are the primary locations of attraction for these students who seek community with other Hispanics, employment opportunities and low-cost higher education institutions [6].

At least 68% of HSIs are community colleges which educate almost half of all Latinos enrolled in higher education. HSIs represent 6% of all higher education and enroll 21.2% of students from other racial and ethnic groups, i.e. these campuses tend to be quite diverse, expanding beyond the Latino population and embracing other groups. Hispanics/Latinos represent 35 million (12.5%) of the U.S. population and are expected to grow to 61 million and represent 18% of the population by 2025. They are among the least educated in the American population, but because of large numbers and relatively youthful demographics, they are making a significant impact at all educational levels. While there are strong reasons to continue to focus attention on Latino education using all delivery modes, the Pew Hispanic Center found in 2002 that 73% of U.S. born Latinos finished high school, 40% obtained some college education and about 14% earned a four-year degree [6].

Fourteen states have 82.4% of HSIs and 59 are in Puerto Rico. Most are located around the perimeter of the country but several are found in the middle of the country. The states with HSIs are Arizona (19); California (109); Colorado (7); Florida (19); Illinois (11); Massachusetts (2); New Jersey (5); New Mexico (25); New York (21); Oklahoma (1); Oregon (1); Pennsylvania (1); Texas (54); and Washington (1) [6].

VII. FOR-PROFIT PROPRIETARIES INCREASINGLY A FACTOR IN MINORITY ONLINE EDUCATION

For-profit proprietary institutions are rapidly stepping in and targeting higher education programs to low income (other minority students) eligible for financial aid. Most of these programs rely on regular higher education institutions for online program design and delivery through use of consultants for shaping course and adjunct faculty. Many of these organizations are serving minority students in face-to-face environments principally in urban centers as well as online. Costs of these for-profit programs are generally two to three times as expensive to the student as public institutionally offered higher education in any type of delivery mode. However, in terms of access, students are getting served who were not previously attracted to more traditional institutions for various reasons. A major minus is that for profits by definition are looking to make profits and fewer students can potentially be served from the federal pool of scholarship assistance for needy students if costs are two to three times higher than other alternatives (i.e. the federal government is paying more for fewer educations). If these students were fully paying for their own programs, there would be no policy question because it would simply be a marketplace decision. Aggregated data does not seem to exist as to the degree students are working to pay part of their higher priced distance education course and their supplementing it with a Pell grant of \$4000, as an example.

VIII. USE OF ONLINE DISTANCE EDUCATION/ALN AT MSIS

A. Government Accounting Office (GAO) – 2004

While there is considerable variation among these institutions, the following appear to be patterns:

- All MSIs offer at least one distance education course (generally online) at the same rate as all other higher education institutions.
- Larger MSIs, just as is the case for all higher education institutions, offer more online courses/programs than small institutions.
- Public MSIs offer more than private MSIs.

MSIs generally offer courses to:

- Improve access for students living away from campus, and
- Provide convenience to adult, employed learners.

All MSIs identify 1) limitations in federal funding policies for infrastructure; 2) student scholarships; and 3) inadequately and ill-prepared faculty as the biggest challenges they face in implementing larger programs in online distance education.

GAO concluded that progress could best be made by collecting more complete data on technology implementations at MSIs and by developing baseline measures on technology enabled education focusing on student outcomes. Institutional benchmarks and measures need to be developed to demonstrate capability to offer quality programs online, as well as administer programs from other locations into a face-to-face environment.

B. The House Education and Workforce Committee (http://edworkforce.house.gov)

The House Republicans have been arguing that college costs are too high, jeopardizing the ability of low and middle income students to attend college [7]. While on a percentage basis, college tuition costs have risen for both public and private institutions, generally speaking, community colleges and public four-year institutions still have substantially lower tuition rates than private institutions. Part of this difference is due to state support to institutions of higher education, particularly in setting tuition lower for instate students to attend these institutions.

There is bipartisan support for eliminating access barriers to higher education generally and to expand opportunities for students by removing barriers and adopting innovative solutions such as online distance learning through the use of advanced technology.

Basic issues of equity and fairness, with respect to various classes of learners and providers, overlay the policy environment. Some of the issues being debated include:

- The 90/10 rule—whether to repeal the requirement that proprietary institutions must derive at least 10% of funds from non-federal sources.
- The 50% rule—whether to repeal or not—the current Department of Education demonstration project includes 24 institutions and allows waivers to other institutions that apply. This rule limits the number of students that may be enrolled in distance education and the number of courses that can be offered by distance education.

- Current definition of HIS—more institutions argue that they should be allowed to participate as the U.S. Hispanic population increases at many institutions.
- Rules applying to federal grant administration—there are variations in MSI footing with respect to other institutions—matching requirements are a particularly sticky issue given that MSIs typically receive a very large share of their funds from the federal government. The policy that you cannot match federal dollars with federal dollars makes it particularly difficult for small MSIs (especially the Tribal Colleges and smaller HBCU land grants) to participate in collaborative projects where they would be expected to provide some match. Institutions in Alabama, Louisiana and Mississippi have been working together to convince state legislatures that they should be considered for state funds which could then be used to attract federal funding. This constraint frequently limits MSI participation in collaborative grants related to information technology infrastructure and distance education. Some federal agencies including NSF and the U.S. Department of Agriculture's Cooperative State Research and Education Service have reduced or eliminated their match requirements for this reason.
- Targeting new federal funding for MSIs with a focus on developing and improving facilities for Internet use and other distance learning capacity requirements. For two years in a row the U.S. Senate has passed unanimously a bill that would authorize millions of dollars for MSIs in this area. To date a comparable bill has not passed the House of Representatives.
- Student financial assistance—complexity of current system—the formula for determining who is eligible and the degree to which student earned income affects the amount of student assistance available to undergraduate students is unclear.

C. The U.S. Department of Education

The U.S. Department of Education has been encouraging development of an environment that will expand access to distance education programs more broadly. Some results from the demonstration program mentioned above have been analyzed. This demonstration program included nine for-profit institutions, five publicly traded, seven private nonprofit, four public universities, one public system and three consortia.

The participating institutions have seen heavy increases in their online enrollments (deemed a success in terms of access), and the policy question remains with respect to provisions of the Higher Education Act as to whether elimination of the 90/10 and 50% rules would further increase access to "quality distance education". Data is currently available from eight institutions from the original group covering six years of implementation. Kaplan, North Dakota State University System, University of Maryland University College (UMUC) and Southern Christian University had 7,930 distance education students in 1998–99 when the project began. Together they now have 63,350 distance education students (2003–2004).

Regis University, the University of Phoenix and Walden University grew from 45,997 in 2000–2001 to 223,404 online in 2003–2004.

Five of the seven largest institutions in the program have more than half their students qualifying for federal financial aid: American InterContinental University (76%); Capella (68%); Kaplan (79%); Phoenix (68%) and Walden (56%).

The major issue identified with the for-profits is cost, although quality questions have not been resolved across all accrediting agencies with respect to common standards for judging outcomes. The area of

learning outcome measures for distance education and face-to-face is somewhat of a "swamp" trying to compare baskets of apples and oranges. Tuition rates at proprietary institutions are higher than at community colleges and public four-year institutions, but sometimes less expensive than four-year private colleges, i.e. a student pays \$8100 for a full time load at Strayer University compared with approximately \$1500 at a community college or approximately \$4000 per semester for instate tuition at a public four-year institution.

Increasingly public four-year institutions are setting tuition for face-to-face instate tuition and online tuition at comparable rates. Often distance education rates are set at instate tuition level for all online students irrespective of location. Some technology fees are increasingly applied in both face-to-face and online environments.

Capella University and Southern Christian University reported nearly one-third of their students are members of minority groups, and UMUC reported that 53% of its undergraduates in distance education are minorities and one-third are African American.

In both face-to-face and online proprietary institutions including DeVry, entrance requirements—barriers to access—such as ACT and SAT are eliminated. Forty-five percent of DeVry's students are minorities and most are first-generation college students.

IX. THE STUDENT PERSPECTIVE—BETTER SERVING MINORITY STUDENTS THROUGH ALN

An increasing number of higher-education students are and will be taking all or part of their educational programs online. Collection of better baseline data and more sophisticated interpretation of the meaning of this evolution with respect to student outcomes and changes for MSIs as well as learners from population groups historically disadvantaged must be studied from a policy perspective.

Minority populations are increasingly choosing to further their education in the online environment (particularly more mature learners who are working and job focused) especially when they have incomes high enough to afford tuition and/or federal assistance to pay all or part of the cost. Two of the major factors identified in this change are: the convenience of online learning; and the decreased difficulty of gaining enrollment, particularly proprietary institutions that have eliminated tests as a barrier to access.

UMUC appears to be a particularly fruitful model for policy study for a possible "best of all worlds effect." UMUC's unique institutional history, its placement within the public University of Maryland System, the scope and scale at which it is able to operate and its seeming ability to attract minority students in large numbers to a reasonably priced large set of offerings is unusual. Their long-term work with diverse military populations around the world may have contributed to their seeming success in attracting minority students.

Some of the additional student focused areas that should be studied and considered in modifying existing state and federal policies and funding streams include:

• The unique role of HBCUs and Tribal Colleges in getting learners started—they serve a large number of minorities. The HBCUs have been particularly successful in the face-to-face environment, yet it is an open question as to whether some of the success factors can be translated into online delivery.

- Recent studies are showing a large increase in students who attend at least two institutions of
 higher education on the way to a bachelor's degree reflecting explicitly planned transitions from
 community colleges to four-year institution (two plus two programs) and the larger availability of
 online course offerings.
- Co-enrollments (sometimes called dual enrollments) are also increasing as larger numbers of students are enrolled in two or more institutions at the same time.
- Students report more difficulty in changing from one institution to another in the real world than in the virtual world—with "cultural factors" playing a large role in the face-to-face environment. Interestingly, students report little or no difficulty today in credit transfer from one institution to another. This problem seems to have largely been solved. All students—minority or not—are shopping for higher education from a variety of vendors. Price, convenience and quality are key factors with respect to selection—including whether the learner must pay for the offering or have subsidized tuition from federal funds or other sources.
- Completion and retention rates need further study with particular attention to minority populations when multiple institutions of higher education are involved in the program. Time to degree is also important to study, but without prejudice as to how long it "should" take for an adult to obtain a degree. Given the older working adult population, consideration should be given to fact that fewer and fewer learners in higher education are of the traditional age, particularly with respect to minority populations, including new immigrants.
- Full participation of minority administrators and faculty with experiences at MSIs as well as other types of institutions should be involved in the accreditation and policy-making process.
- Different states and regions have opportunities and challenges with respect to orchestrating congruence among various public institutions of higher education, including the MSIs—the south —toward the east has the majority of HBCUs, the west and southwest and increasingly the middle of the country have more TCUs and HSIs. These regional differences must be recognized in state and regional policy decisions, not simply at the federal level.
- Policy decisions about support for building MSI capacity for online distance education should not simply focus on technology and first-tier access questions, but rather focus much more heavily on the faculty teaching and learning components and quality student support services. It is clear from some of the success at the undergraduate level achieved by MSIs, particularly the HBCUs, there is learning that may be translated into the online world.
- Increasingly, MSIs are joining together for policy advocacy purposes—The Alliance for Equity in Higher Education [8] includes the MSIs discussed in this paper and together they support:
 - 1. Enactment of the "Digital and Wireless Network Technology Program Act", an effort to address the variety and scope of the nation's MSIs information technology needs.
 - 2. The creation of new sections in the Higher Education Act (HEA) under Titles III and V that provide new funding for technology maintenance and enhancements at HBCUs, HSIs, and TCUs.
 - 3. The creation of a new subpart under the Minority Science and Engineering Improvement Program (MSEIP) during the reauthorization of HEA to encourage improvements in the infrastructure and application of information technology at MSIs.
 - 4. Increase access for MSIs to new and existing federal programs that assist in the development of science and technology at higher education institutions and provide MSIs with opportunity parity to participate in the latest technological advancements.
 - 5. Ensure that MSIs can participate fully in the NSF proposed Advanced Cyberinfrastructure Program.

- 6. Develop new graduate level opportunities to enhance the capacity of MSIs to train future faculty and senior institutional leaders.
- 7. Continue and expand funding from the Department of Education for preparing teachers to teach using technology.
- 8. Create a Hispanic-Serving Institutions Program within NSF similar to the TCUP and the HBCU-UP to build the information technology capacity of HSIs in the fields of science, technology, engineering and mathematics (STEM).
- 9. Target specific state funds to MSIs for expanding information technology capacity.
- 10. Expand industry contributions to MSIs for information technology capacity and innovation.
- MSIs are increasingly seeking partnerships with a variety of educational institutions in the U.S. and around the world with particular attention to cultural, language and historical dimensions. National policy issues with respect to support for these activities are under consideration.

X. CONCLUSION

A large agenda of institutional and student focused issues are under discussion focused on national and state policies with respect to MSIs and minority learners, particularly those requiring federal funding assistance. Not simply in the online environment, but across higher education, questions are being addressed as to how to move from a more typical monocultural framework to a multicultural organizational framework. No higher education institution can afford to ignore the cultural traditions, norms and perspectives of all other racial and ethnic groups in the resolution of these issues. The U.S. has and will continue to benefit substantially from its diversity. Some of this is about full access, equality, justice, freedom, choice and inclusiveness. But as recognized by many players, this is a question of enlightened self-interest. High quality, accessible higher education—maintaining and enhancing our historical standards is absolutely key to the future of the country. We continue forward as a nation of immigrants and minorities—our future together is all that is certain.

XI. ABOUT THE AUTHOR

Janet Polev is CEO and President of the American Distance Education Consortium (ADEC). She develops collaborative distance education initiatives and conducts research and education programs related to technology access and applications with more than 60 land-grant university members and international affiliates. In April 2002, she was inducted into the International Adult and Continuing Education Hall of Fame and serves on its Board of Directors. She received the Mildred B. and Charles A. Wedemeyer Award for Outstanding Practitioner in Distance Education in 2000. She currently serves as principal investigator on a \$5 million National Science Foundation grant for advanced networking and applications including work on distance education and digital libraries in China. She is a Co-PI on an NSF start-up program in Human Language Technology—a collaboration between U.S. and Moroccan institutions. She manages the USDA funded Agricultural Telecommunications Program; manages a cooperative agreement with the National Agricultural Library (NAL) of USDA and the Universidad de Concepcion (UDEC) in Chile; is the chair-elect of the NAL AgNIC Board of Directors; and has received several Sloan Foundation and U.S. Department of Commerce grants. She is a member of the Council for Academic Management for the eArmyU; serves on the Editorial Board for the American Journal of Distance Education and the Board of Advisors for The Growing Connection (TGC), FAO; is a liaison to the National Association of State Universities and Land Grant Colleges (NASULGC); was a member of the Penn State Advisory Board to the World Campus Initiative; was a member of the Great Plains Network Advisory Committee; and is a special member of the University of Maryland Eastern Shore Graduate Faculty. She is a professor in the College of Journalism and the Institute of Agricultural and

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Dr. Poley is the author of a number of journal articles, book chapters and presentations on information technology and distance learning and currently co-authoring a book titled "Building an Inclusive Future for Learning: A Practical Guide for Campuses and Communities".

She has been involved in training, technical assistance, program design and evaluation in more than 25 countries in Asia, Africa and Europe. In 1994, she was recognized as one of the 100 outstanding information technology leaders in government, business and academia by Federal Computer Week. From 1988 to 1994, she was Director/Deputy Administrator for Communication, Information and Technology (CIT) of the Extension Service, U.S. Department of Agriculture (USDA). Prior to 1988, she held a number of positions in international development and training within USDA. She served as Program Manager for the USAID funded Training for Rural Development projects, living in Tanzania from 1980 to 1986. In recognition of her international contributions, Poley received the U.S. Congress' Excalibur Award and USDA's International Honor Award. She received the USDA Administrator's Award of Excellence in 1991 and the Secretary of Agriculture's Award for Workplace Diversity in 1992.

From 1966 to 1975, she was a faculty member at the University of Nebraska-Lincoln. She holds three degrees from the University of Nebraska-Lincoln, a Ph.D. in Education, M.S. in Nutrition and B.S. in Journalism and Home Economics.

She is married to Jeffrey M. Poley, an architect who also works at ADEC.

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THE CHALLENGES OF TRANSNATIONAL ONLINE LEARNING

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ABSTRACT

Globalization is enabling transnational provision of post-secondary education. The leadership of higher education needs to attend to issues of quality and accreditation.

KEYWORDS

Quality, Governments, Asynchronous Learning, Leadership, Acceptance, Faculty

I. INTRODUCTION

A convergence of trends—some technological, others political and economic—is increasing awareness of just how porous national boundaries are with respect to regulating the distribution and availability of tertiary education. The presence of universities from nations of the developed world in developing countries is now commonplace, and it is increasingly possible to find developed nations' colleges and universities in other developed countries [1]. Depending on one's definition of "multi-national", transnational providers of post-secondary education are either now operating or will soon do so.

These developments reflect the extent to which the process of globalization has affected education. The advent of the World Wide Web and the spread of information and communications technology make it practical to think of prospective learners as having a much wider array of choices among providers of post-secondary education than was previously the case. This, in turn, builds off of the general acceptance of market economy principles, including unrestricted trade in goods and services and the student as a consumer of educational services.

In April 2004, the Organization for Economic Cooperation and Development (OECD) and UNESCO began work to develop guidelines to assure quality in cross-border education. In October 2005 and most recently in January 2005, the two organizations were able to consult widely with members and produce a draft text (see http://www.oecd.org/dataoecd/34/42/34732302.pdf) to be considered by member countries and UNESCO's Executive Board. This work mirrors or, at a minimum, parallels the thrust of the Sloan Consortium. As such, a review of this and other similar works affords the Consortium's Board of Directors an opportunity to compare and contrast their approaches and concerns for quality with those of colleagues.

The review presented here was facilitated by discussions with leaders of the Sloan Consortium when the organization held its annual meeting of directors at Royal Roads University in Victoria, British Columbia, Canada, where the author then served as vice chancellor and president.

II. AN "OUTSIDER'S" VIEW OF THE SLOAN CONSORTIUM'S APPROACH TO QUALITY

Sloan-C publications present an approach to asynchronous learning that is generally upbeat with respect to the potential this kind of teaching and learning offers and modest insofar as the impact likely to result. Sloan-C's quality framework consists of five "pillars" —learning effectiveness, cost effectiveness and institutional commitment, access, faculty satisfaction, and student satisfaction (see the figure below)—and invokes the criterion of "at least as good as" or "comparable to" conventional education to assess learning effectiveness.



Figure 1. Sloan Consortium Quality Framework and Five Quality Pillars

For the Sloan Consortium, responsibility for the quality of learning lies with the "learning organization" or institution and is cast in terms of continuous quality improvement. The presumption is that learning organizations are concerned for the quality of the education they provide or, at a minimum, sensitive to the standards of quality required for accreditation and re-accreditation. This perspective most likely reflects the membership of the Sloan Consortium, which is predominantly American institutions, and these are subject to regulation by regional accrediting agencies as well as an array of specialized accrediting bodies. Canada, by contrast, has no accrediting bodies.

"Acceptance" of asynchronous learning by faculty and students is an important element of Sloan-C's approach to quality. The importance of this particular consideration increases as one considers the role academic presidents play in fostering or discouraging the adoption of new methods of instruction: i.e., generally aversive to risk and reluctant to get far out ahead of their faculty or students; hence, resistance from professors and students to new methods is likely to reinforce presidential conservatism.

Furthermore, "at least as good as" or "comparable to" standards juxtapose asynchronous learning with traditional classroom lecture or seminar formats which are the ones with which presidents are most comfortable. That the quality of teaching or learning in those conventional methods raises some question to whether meeting or surpassing those standards is, in itself, something to settle for with respect to quality.

In addition, the age and backgrounds of most academic presidents generally mean that, as a group, they are neither especially familiar with technology nor aware of its more advanced uses in teaching and learning.

III. OECD-UNESCO GUIDELINES ON QUALITY PROVISION IN CROSS-BORDER HIGHER EDUCATION

Less-sanguine views of the impact of asynchronous learning are apparent in many of the public documents emerging from OECD and UNESCO. Policymakers recognize the potential of technology-based education to overcome barriers to expanded access to tertiary learning and numerous regional consortia or virtual universities (e.g., African Virtual University) have been established to exploit the potential.

Nevertheless, the perspective brought to bear to date by OECD and UNESCO also includes concern for the student-as-consumer; hence, the question is posed –

[W]hat might be done to limit the risks of students falling victims to rogue providers that offer a low-quality cross-border educational experience and qualifications of limited value? [2]

This concern stems, in part, from the recognition that asynchronous learning is something much more than digital correspondence courses and, instead, presents real challenges with respect to quality assurance.

'Borderless education' . . . crosses several boundaries. The crossing of these boundaries gives rise to particular quality assurance challenges. Governments, higher education agencies and institutions are challenged by the crossing of national borders in transnational education, the crossing of organisational borders in consortia-based education, the crossing of sectoral boundaries in new educational alliances between universities and businesses and the crossing of functional boundaries made possible by developments in ICT. Virtual education can cross all these boundaries simultaneously which means that a variety of quality assurance issues need to be addressed. The challenges to quality assurance arise in part because the definitions of quality that we routinely use and the attendant quality assurance arrangements have been defined in the context of traditional categories, that is, national systems of higher education, individual institutions, higher education sectors and a seamless educational process. The emerging categories that are associated with 'borderless' and virtual education suggest a need for some redefinition of 'quality' and quality assurance arrangements [3].

By contrast, the Sloan-C quality framework is relatively simple and elegant, with little of the "messiness" attendant to a view of asynchronous learning as something that is happening to a country or group of countries, as opposed to something being done by institutions in a country that has been, to date, apparently impervious to foreign delivery of learning [4].

At the same time, however, the OECD-UNESCO agreement on transnational education is a voluntary, non-binding and un-enforced one that rests on the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region and its very cautious but explicit acknowledgement of the principle of institutional autonomy (see the Civic Education Project, http://www.cep.org.hu/). As such, this otherwise more expansive approach to quality assurance actually

ends up being more akin to than different from Sloan-C's framework and thus lodges responsibility for quality assurance with the institution or learning organization.

As Middlehurst and Campbell [5] note:

- UNESCO, through its Global Forum on International Quality Assurance, Accreditation and the Recognition of Qualifications, is promoting the development of principles of good practice [a la WICHE and SREB's Electronic Campus] in cross-border education, national capacity building in quality assurance and the modernizing of regional conventions on the recognition of qualifications. UNESCO has therefore both a formal, quasi-regulatory role (through its international scope and its broad governmental membership) and a less formal, guidance, capacity-building and information role.
- The OECD is aiming to be the "bridge" between the world of trade and education, improving
 communication and understanding and providing data about the trends in education and new
 forms of learning.

The Sloan-C approach seems to be quite in tune with that of the OECD.

IV. SOME PERSONAL OBSERVATIONS

As Sloan-C has reported [6], online learning has moved from the periphery of American higher education to the mainstream. A majority of academic leaders there asserts that online learning meets and exceeds the quality of more conventional methods and formats. Such is not the case in Canada and, based on personal experience, nor is that the case elsewhere.

Just two years ago, the author and one of Sloan-C's directors were contracted with by a Middle Eastern nation's ministry of higher education to assist that country's accreditation commission in the design of licensing standards for colleges and universities seeking to offer programs online. It was made clear to us that an aim was to restrict—if not deny—access to online learning, even in the case of programs targeting expatriates, not citizens of the country.

In Canada, Canadian Virtual University (www.cvu-uvc.ca), Campus Canada (www.campuscanada.ca), and COHERE (www.cohere.ca) are multi-institutional consortia offering online learning courses and programs. There is no real Canadian counterpart to Sloan-C, so it is difficult to inventory the extent to which online learning has moved from periphery to mainstream, but the very conservative nature and strong traditionalism of Canadian higher education encourages one to think in modest terms. While distance education has a tradition in geographically-large and sparsely-populated Canada and the country ranks second to only South Korea in terms of broadband access, online learning has not achieved the scope or momentum it has in the US.

Similarly, China's and most Southeast Asian countries' universities are quite resistant to online learning. Conversations with officials in China, including officials of the Ministry of Education, often include references to online offerings in the mid-1990s that were seen as little more than text on the Web and involved some instances of fraud.

These concerns notwithstanding, the Chinese central government is insisting on expanded use of technology-based learning. The **2003-2007 Action Plan for Invigorating Education** [7] calls for "the establishment of an online (or Internet-based) education public service platform ensuring sharing of both

hardware and software resources" and "populariz[ing] the use of information technology within the teaching process in educational institutions of all types and levels." One of China's most prestigious institutions, Peking University, has elected to develop an arm's length organization, Beida Online (http://edu.beida-online.com/) to offer online courses and programs.

In the case of Uganda's Makerere University, initial discussions with Royal Roads did not emphasize use of RRU's self-built e-learning system. A week-long visit by Makerere's vice chancellor, including sitting in on both face-to-face residencies and e-learning, convinced him to focus attention on online learning as well as the content of the programs to be worked on jointly by the two institutions.

A similar outcome came about in the course of developing memoranda of agreement between Royal Roads University and three Thai institutions for delivery of RRU's Master's in Conflict Analysis and Management. In early explorations, the Thai institutions expressed strong concerns about any e-learning being included in joint undertakings. A visit to Royal Roads' campus and experience of Thai presidents, vice presidents, and deans changed those attitudes completely, and Thai faculty will be spending time this summer in Victoria gaining familiarity with the RRU e-learning platform while Royal Roads technology and instructional design staff will be visiting each of the Thai universities in advance of the Master's program's launch in November 2005.

These and other personal experiences suggest several tentative "lessons" about quality online learning viewed from a transnational perspective:

- Developing countries' universities are generally skeptical of e-learning, initially because they perceive their nations' and their institutions' capacities for online learning to be very marginal, at best. This, in turn, increases their doubts about the efficacy and quality of learning that depends on the existence of infrastructure technological and human.
- The average age of the professoriate in many non-Western countries and their own lack of exposure to and experience with technology cause faculty and, by extension, administrators to question whether online learning can be anywhere near "as effective" as "tried and true" lectures and seminars. Moreover, because much of the literature about e-learning focuses on the needs of the learner, some faculty view this approach as diminishing their status or at least placing them in potentially embarrassing situations where they are uncomfortable and unfamiliar with e-learning.

In China, for example, government officials speak of moving away from "teacher- and text-centred" to "learner-centred" approaches, regardless of how education is delivered. Informal discussions with Chinese university faculty suggest that this attitude has already been viewed as something of a threat to the status of faculty.

- Developed nations' universities appear to be content with applying accreditation standards, hence, peer-developed standards of quality in assessing online learning. In this sense, then, online learning has indeed, as the Sloan Consortium's most recent survey suggests, moved into the "mainstream" of North American higher education.
- Reflecting perhaps recent decades movement toward greater regional integration, European
 nations' post-secondary institutions seem to harbor questions about the utility of national or
 institutional quality assurance processes and appear to be looking to construct some transnational
 standards for online learning. This creates an opportunity for Sloan-C to engage European
 colleagues in some substantive and potentially productive discussions about how to establish and
 use quality standards.
- National governments in general are "encouraging" educational institutions of all types and at all levels to explore e-learning, in part it seems, because of recent large-scale investments in

- telecommunications infrastructure, including broadband. Additional motivation for government appears to be concern for (a) having more citizens able to use technology and (b) the hope that online or any other type of technology-enhanced learning can scale to absorb the numbers of students seeking access to education.
- Educators and policymakers recognize that new providers of learning are emerging which do not conform to traditional models and structures and therefore may not "fit" within existing frameworks of quality assurance. These new providers include consortia of universities, forprofit companies, and subsidiaries of universities.
- It remains unclear how national, regional and specialized accreditation processes will affect elearning content and delivery. Whereas a reasonable argument can be made that specialized accreditation in particular (i.e., AACSB, ABET, etc.) has tended to "homogenize" accredited programs, no evidence has emerged yet to indicate how this will impact online learning. Nevertheless, it is not unreasonable to expect that accreditation will have some effect and that the process may in fact ensure some degree of quality, but accreditation may also push online content toward greater similarity and, in the process, could contribute to "commoditization" of e-learning.
- As Oblinger [8] has observed, the current generation of traditional-aged students have expectations associated with their use of technology that entail services being every bit as accessible as the online content itself. Moreover, the availability of those services determines to some extent the perceived quality of the content or the online learning. Sloan-C's quality framework incorporates a concern for student acceptance of online learning that is less apparent than in other quality guidelines [9].
- Presidents do not seem to play especially visible roles in online learning. This is not surprising given the average age (55–56) and backgrounds (social sciences, humanities predominantly) of most North American university presidents. The general conservatism of most presidents could reasonably be expected to translate into something less than a strong leadership role with respect to online learning.

At the same time, the author's recent experience with academic presidents from developing countries suggests that personal exposure to and experience with online learning can influence significantly and positively the attitudes of university administrators. Quality of learning is, of course, of particular importance to presidents, but student and faculty acceptance of e-learning will likely top concern for quality, at least in their initial thinking. The fact that online learning has attracted and continues to engage serious research by academics into what constitutes effective practice may serve to allay some of the concerns of presidents.

Then and as suggested by the last few years' results from Kenneth Green's annual survey for the Campus Computing Project, presidents are apt to be concerned for their institutions' respective ability to afford to maintain and enhance the computing infrastructure of universities, particularly as online learning becomes more of a part of the mainstream. Even as hardware costs for PCs fall to triple-digit prices and servers' price tags come down, computing infrastructure costs continue to exceed what many presidents see as affordable within cost structures where salaries and benefits (not to mention basic operating and maintenance expenses) consume most of the resources of institutions.

Presidential anxiety over the quality of online learning is real since most know all too well how perceived quality of education ranks among the matters students and their families assess in making choices among institutions. That anxiety is most likely acted on in the US by presidents' involvement in accreditation and re-accreditation, processes that have not been and are not especially receptive to online learning to date. In that regard, then, Sloan-C's emphasis on student and faculty acceptance as quality criteria is probably well-placed, while the European focus on creating a regulatory framework within which

institutions from multiple nations can find common ground.

The work of the Sloan Consortium to date has been both pragmatic and challenging with respect to the quality of online learning. Its framework for quality fits well within the American system of accreditation and re-accreditation. It remains unclear to this author whether and how that work has made its way into the portfolio of concerns university presidents give time and attention to in the normal course of affairs.

At the same time, Sloan-C could benefit substantially by expanding their discourse to include more of the sorts of concern represented by the activities of OECD and UNESCO. In addition, the "wary" but growing interest of some developing countries' universities suggests that Sloan-C might want to consider enlisting presidents and provosts of member institutions and organizations to host a session to which their peers from developing nations would be invited. E-learning, despite its "mainstream status", remains risky in the eyes of many university administrators, so hearing the good, the bad and the ugly of institutional initiatives in online learning from one's colleagues might well quell presidential concerns.

V. ABOUT THE AUTHOR

Richard Skinner is the Senior Vice President for Programs and Research, Association of Governing Boards of Universities and Colleges, Washington DC – USA. He served as president and vice chancellor of Royal Roads University from 2002–2006.

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POSITIONING ONLINE LEARNING AS A STRATEGIC ASSET IN THE THINKING OF UNIVERSITY PRESIDENTS AND CHANCELLORS

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I. INTRODUCTION

Within our nation's public universities, online courses and programs have been increasing in number. This increase has led to the establishment of a National Commission on Online Learning through a collaborative effort between the Alfred P. Sloan Foundation and the National Association of State Universities and Land Grant Colleges. This commission intends to examine the core questions: how do college and university presidents and chancellors view online learning, what levels of information—both operational and policy-related—do they have about this developing field, and do they view it as a strategic asset or simply a newer means of teaching students?

Online learning is becoming an increasingly popular way for students to take courses and for faculty to teach, with the number of students taking at least one online course growing more than ten times as rapidly as the head count enrollments in post-secondary education. Clearly, the time is right to reframe a national dialogue amongst the leaders of our traditional universities and colleges about this asset.

Many of the earlier dialogues amongst presidents and chancellors relative to online learning focused on the quantity and, to a lesser extent, the quality of online instruction and its promised impact on our traditional campuses. Previously, online learning was also often associated with for-profit universities which to date remain in a growth phase and are developing academic acceptance.

Several questions emerged early in our research planning:

- Can we discern from conversations with presidents and chancellors, how they believe their institutions are benefiting from their online learning programs?
- Do they view online education specifically as a strategic asset for their institution?
- In what ways do they envision this asset developing in the future?
- What impediments do they face in nurturing and supporting this development?
- What ideas, information, or strategies would allow presidents and chancellors to promote this development?

II. METHODS

At the heart of this study was a series of interviews with university leaders on the topics of online learning and their strategic thinking relative to this learning format. The preferred method of establishing the interviews was to contact initially either the president or the administrator responsible for that institution's online learning program to arrange a structured interview.

Early on, it was found to be most helpful if one or two of the administrators responsible for the online learning programs could be interviewed first to gain a baseline understanding of what they had accomplished and the institution's future goals. With that information in-hand, the presidents themselves were then interviewed.

In total, twelve research interviews were conducted. In the selection of institutions to be included in this study we attempted to include a range of historical and operational involvement in distributed learning. We initially concentrated on comparatively large, public universities or systems, including statewide systems, that are relatively new to offering online degree programs, as well as those which historically have been leaders in this developing field. We also selected traditional multi-campus universities with a strong research-intensive central campus (with and without a medical school) and universities that are developing or reinvigorating branch campuses or campuses where the primary emphasis is on teaching and not research.

In order to obtain a geographically diverse sampling, interviews were carried out with school leaders in the following states: Florida, Illinois, Maryland, Massachusetts, New York, Pennsylvania, Texas and Washington.

III. INITIAL INTERVIEW RUBRIC

During our initial interviews, it became clear that we needed to provide a framework for discussion, tacitly listing a number of areas at the institution that might be affected by online learning initiatives, thus leading the university leader to a more detailed discussion of online learning as a strategic asset. Initially we isolated a number of policy areas which presidents might readily identify as being impacted by online learning:

Recruitment/Access—Online learning systems are being used at the institution to increase student access and increase enrollment in individual for credit or not for-credit courses, certificates or degree programs. Student recruitment is clearly affected by the presence of online learning classes and programs and the institution's ability to provide blended on-campus and online classes.

Retention—The availability of online programs and technologies not limited by traditional calendars or geographies provides students with increased flexibility to gain desired coursework or mentoring.

Enrollment Management—Online learning is being used to enhance enrollment of specific student categories or manage enrollment on or between individual campuses.

Degree Completion—Beyond retention, online learning is being used to enable late-degree students to complete their degree requirements (for example, an international student who faces visa challenges late in their study career and completes degree work abroad).

Responsive Program Development—Online learning programs can often be more quickly initiated than traditional to meet a specific need or serve a particular student population.

Disaster Preparedness—Online learning systems play a role in the campus or system business continuity plan, enabling students to continue their degree programs during periods when their institution is limited in operations or closed.

Effects on Traditional Classrooms—Online learning has created increased expectations for on-campus technology and technology-based interactions including faculty and students.

Blended Courses and Programs—Online learning is being used to attract students to campuses when full time, traditional on-site enrollment is either not possible or not desirable.

Continuing and Professional Education and Certification—Online learning is being used very effectively in the delivery of continuing education or professional development required for certification.

Quality of Instruction—Online learning has increased awareness, fostered discussions and promoted strategies to enhance the quality of instruction both online and in the traditional classroom.

Cost of Instruction—Online learning has increased awareness, fostered discussions and promoted strategies about cost of instruction at the institution.

Technology Infrastructure—Online learning has not only created an expectation that the institution's technology infrastructure will be constantly upgraded, but provides additional incentive for infrastructure development which benefits all areas of the institution's operations.

Physical Plant/Capacity Balancing—Online delivery has allowed institutions to serve more students while providing for more effective utilization of classrooms, physical facilities, faculty and staff.

Faculty Development and Incentives—Online teaching opportunities are considered to have positively impacted the recruitment and retention of digitally creative faculty and staff. It has also given institutions a viable means of actually helping to develop employees' capabilities and provide realistic incentives.

Partnerships—Online learning programs have created or been central to new partnerships with other institutions or organizations nationally or internationally.

Political Outreach—Online learning has given the institution increased visibility in legislative settings and the ability to provide service to varied constituents in any political district or area.

Alumni and Donor Outreach—Online learning enables institutions to continue to serve their graduates educationally, thus enhancing alumni and development relationships and activities.

This rubric was in no way intended to represent a complete list of potential benefits to the institutions, but rather to begin discussions in the interview format, with expectations that new areas of benefit would emerge within each discussion.

At the same time, this developing list of topics does represent a solid framework for discussions, and might also serve as an outline of talking points as this national dialogue with university leaders unfolds. Clearly, this set of topics allowed the interviewees to view online education in a broader, more comprehensive way than simply through the lens of enrollment.

We intentionally did not make use of the Sloan-C "five quality pillars"—access, learning effectiveness, faculty satisfaction, cost-effectiveness and overall student satisfaction—in large part because this very logical and useful organizational system appeared to be developed primarily by individuals involved in the operations of online learning, and we wanted to determine if the same concepts would emerge from the presidents.

IV. RESULTS OF QUALITATIVE INTERVIEWS

Our initial interviews revealed a general pattern of executive thought that is emerging, particularly for presidents at our larger public universities or university systems.

First, interviews with higher education presidents quickly emphasized the importance of an internal champion for distributed education at the institution, often a middle- to upper-middle level central administrator or faculty visionary. These individuals and their many faculty colleagues have typically developed an evolving approach to delivering higher education that is dramatically changing, and are critical to the understandings expressed by the school or system's CEO, whose own professional experience usually reflects more traditional approaches to teaching and learning. In their enthusiasm, these champion supporters continue to educate their university's leadership on the growth and broad potential of online learning.

Discussions and early attempts at educating presidents often centered at first on demonstrating the potential of online education to impact enrollment and the learning experiences of students already enrolled in online courses. It is important nonetheless to urge caution when encouraging university leaders to view online learning simply and solely as a means to increase their enrollment. Online learning may provide increased enrollment, but depending on the individual institution's business model, this may be of only limited strategic value. Depending on the individual institution, on a state by state basis there is a wide range of models that determine levels of financial support. Some institutions are compensated on the basis of student numbers, many are not. In most cases, if state funding is based on student numbers there is a limit on either the level or amount of compensation.

Among the presidents, there is also a reasonably clear understanding that enrollment in online courses is growing and is becoming a recognizable portion of the reported numbers of students enrolled in our major

universities.

If we are to convince presidents of the value of online learning, we must be careful not to make claims that cannot be substantiated. Presidents remain cognizant that 80–90% of their students are still taking courses in the traditional manner. They approach all counts and statistics with a finely trained eye, and a healthy skepticism for numbers that might not be making rational comparisons. Conversations frequently included a desire for more accurate numbers of online learners that take into account those who were "truly online" versus those in "blended" or "technology enhanced" learning situations.

One persistent interview theme was the danger of over-selling online learning based on enthusiasm and various methods of counting online learning students. Presidents and chancellors clearly remember the early rhetoric of a decade ago that online learning enrollments were going to grow at exaggerated rates and that for-profit universities would dominate the market.

In nearly every interview, it became immediately apparent that any dialogue about online learning requires a consistent vocabulary or common terminology. Interviews with campus administrators or individuals not involved in online learning are hampered by discussions on the meaning of descriptors. Online learning was frequently confused during the interviews with *distance education*, *technology enhanced learning*, *blended courses*, *interactive learning*, *hybrid programs* and a dozen other terms. Labels such as "asynchronous learning networks (ALN) brought nothing but confusion.

When asked about the president's perception of the quality and the role online learning plays in quality issues, there is still a widespread perception that it is a learning environment probably below the quality of traditional on-site, face to face instruction. Logically, when pressed, interviewees did routinely admit that one could only hope that there would be as much evaluation of on-site teaching as there has been of online teaching. The discussions would usually evolve to recognition that there is a range of educational quality in both on-site and online courses.

Interviewees also consistently noted lack of clear data and comparisons of the costs of online versus face to face instruction. Any national dialogue about online learning as a strategic asset will require clearer, more detailed information and analysis in this regard for the decision-makers. Simply put presidents want to know the costs of online learning and how they compare to what they are already paying for face-to-face instruction.

In the views of university system heads interviewed, there are clear distinctions relative to the type of campus and the current applicability of online learning to that campus. When a campus is perceived as research oriented, as is often the case with the central or main campus, there is much less CEO-expressed interest in online learning as compared to campuses which boast a stronger teaching mission.

This is not unsurprising, but complicates how the President views online learning. On a research-intensive campus, given a choice of what to fund, a research area that can generate external funds and prestige will probably take precedence over online learning.

It is also important to remember that the primary office of the president is most commonly on the research-based main campus and thus provides the most intensive, daily contact with those primarily interested in research, grants and contracts. An interesting footnote, though, is that campuses with a medical school often do have a significant online presence, primarily for the purpose of certification and

continuing professional education.

In a technological sense, when pressed, respondents noted that online education had an effect not only on classroom instruction but also the technical infrastructure to support institution-wide information technology (IT). Respondents though did not immediately highlight this aspect without discussion and prompts. Only one of the interviewees is nationally recognized for his personal use of IT tools and technologies, and not surprisingly, none of the other respondents spontaneously described themselves as being exceptionally proficient with the latest technology.

It is significant to note that, commonly with the university system heads interviewed, one or more campuses in particular was/were identified as being at the center of their efforts in online learning. The campus identified as having the greatest online enrollment was usually not the main campus although the individual responsible for system wide online programs was typically located at the main campus.

For most interviewees, the concept of "truly distant" learners was less common, a conceptualization that differs significantly from the profiles of online learners often heard from professionals in the field. The concept of localness—a vision of online learners located close to a campus—seems to hold true but is not recognized across the board. This is obvious particularly with campuses where a significant number of courses or degree programs are blended in nature. In that same light, if there was one particular surprise uncovered in these interviews, it was the consistent lack of significant interest in expanding online learning into the international market. When it was reiterated in these interviews that anyone, anywhere can take the online learning courses or degree programs, the discussants' focus remained on specific state, regional or national markets or needs.

Also noticeably absent were spontaneous responses highlighting the value of online learning to influence alumni and donor relations, partnerships, or political outreach.

V. STRATEGIC ASSET OR OPERATIONAL NECESSITY?

As the interviews progressed, the notion of "strategic asset" itself developed in the thinking of the authors, potentially providing a summary point on the thinking of the interviewed presidents relative to online learning. In sum, did the university CEOs interviewed see online learning as a strategic asset, or simply another operational component of their educational operations in the current day and age?

From a definition standpoint, strategic assets are those that have a planned, direct and significant impact on achieving objectives and strategic plans across the institution. How prepared are presidents and strategic planners at colleges and universities to recognize the strategic importance of online or distributed learning?

In addition to the themes outlined above, selected interviewees were specifically asked to highlight locations within their institution's own strategic plan which outlined online learning and its importance to the school or system. Responses to this interview prompt varied, with online learning oftentimes not readily identifiable within the institution's publicly available strategic vision document.

After reviewing the collected interview data from this project, we can clearly state that the broadest impact that online learning might bring to an institution has not crystallized conceptually for strategy leaders in college and university settings. Although the presidents who spoke with us were often familiar

with or had been briefed on developing online learning trends and their operational importance, we perceived a clear need for the positioning of online education as a strategic asset, rather than simply "another way of doing business" in the 21st Century, an asset that brings positive influence in a *systemic* way to multiple facets of the modern-day university. It was hoped that the baseline nature of leadership thought uncovered in this interview-based research might serve as a catalyst for a future study, as well as spur a national dialogue about online learning and its strategic positioning

VI. NASULGC INITIATIVES AND QUANTITATIVE RESEARCH

Following the completion of the qualitative study, conversations to expand this research and executive-level dialogue began with Drs. Peter McPherson, President, and Mortimer Neufville, Executive Vice President, of the National Association of State Universities and Land-Grant Colleges (NASULGC). NASULGC is the oldest and largest association of public universities and has a history of successfully stimulating and conducting national dialogues on emerging issues of importance in American higher education.

In May 2007, the National Association of State Universities and Land-Grant Colleges (NASULGC, A Public University Association), in cooperation with the Alfred P. Sloan Foundation, appointed the NASULGC-Sloan National Commission on Online Learning. Under the direction of Robert Samors, Associate Vice President, NASULGC, and with the research support of Jeff Seaman, Chief Information Officer and Survey Director, Sloan-C, this survey initiative was designed to gage in greater detail CEO views on distributed learning as truly systemic, reaching across the modern university [1].

Survey data previously collected by the Sloan Foundation [2, 3] clearly showed that online learning continues to emerge in the mainstream of higher education in both size and breadth of course and program offerings. In particular, previous Sloan-supported surveys solicited views from the academic community as well as from chief academic officers relative to online education.

What remained unquantified, however, was an answer to one of Frank Mayadas' initial questions and that was how to better understand the views and experiences of presidents and chancellors relative to online learning, and specifically to explore the role of online learning in their strategic thinking, in the light of Sloan's ongoing survey initiatives.

Respondents were also surveyed to determine what they saw as barriers to their strategic use of online education and what role NASULGC might play in the incorporation of online learning into its member institutions' strategic planning.

Indeed, The NASULGC-Sloan National Commission on Online Learning's *Survey of Presidents and Chancellors: Online Learning as a Strategic Asset* represented one of the first large-scale polling of university and system CEO's on issues of online learning, based on responses from 77 college, university, and system heads.

VII. RESULTS OF QUANTITATIVE STUDY BY NASULGC

Detailed results from this survey and the accompanying data analysis are available in NASULGC-Sloan National Commission (2007), but summary results clearly show that the data provided quantitative support to themes first isolated in the qualitative study.

In the NASULGC-Sloan survey, institutional leaders confirmed a strong interest in the strategic importance of online learning with 66.7% of respondents noting that online education was critical to the long-term strategy of their institution, while only 4% responded that online learning played no strategic role. It was confirmed, however, this view has only developing reflection in formal, institutional planning procedures, as the survey data showed that online learning was present in the strategic plans of the polled institutions, although not yet in a majority of schools responding. Only 40.5% of respondents noted that online education was represented in the institution's strategic plan.

The NASULGC-Sloan data set also provided a more detailed look at operational areas of the modern university which school and system leaders saw as linked to online learning. In short, online or distributed education will profoundly influence individual sectors of an institution's operations such as admissions/recruiting, financial aid, and student services, potentially proving to be a strategic asset in a variety of ways for differing university audiences. Of particular interest to readers of this journal issue on the theme of access, responses indicated that, strategically, university leaders surveyed linked online learning primarily to issues of student access and recruitment:

- 71.4% of respondents linked online education to "increasing student access."
- 61.8% linked distributed education to "growing professional and continuing education."
- 57.1% looked to online learning to "attract students from outside the traditional service area."

Last, previous Sloan-supported nationwide surveys had identified a number of areas of concern for the growth of online course and degree offerings, including faculty acceptance of online education and the time and effort required to teach online. Survey designers wanted to verify whether institutional leaders shared these concerns.

The evidence from the resulting data set suggests that respondents did note the financial and time/effort costs of distributed learning, but do not strongly emphasize the lack of faculty acceptance:

- 40.8% of respondents noted that "online courses cost more to develop" than traditional offerings.
- 35.5% linked distributed education to "greater faculty time and effort" being required.
- Only 22.4% noted "a lack of acceptance" of online instruction by faculty.

VIII. NASULGC-SLOAN NATIONAL COMMISSION ON ONLINE LEARNING BENCHMARKING STUDY

National Commission plans for the immediate future include following the 2007 data collection with a planned "benchmarking study." The goal of this benchmarking activity is to begin the process of identifying some of the key factors that lead to "successful" online programs at public colleges and universities. To date, much of the research regarding online learning has focused on the questions of "what are campuses doing" and "why are they doing it." Not as much attention has been paid to the question of "how do campuses with successful online programs organize themselves" (revenue/business models, organizational structure, faculty incentives, etc.).

To begin to answer that question, the Commission will identify 18–24 joint NASULGC/AASCU members, equally divided between institutions identified by the Sloan-C survey as "fully engaged" and "engaged" (high potential for growth). Through a combination of well-defined short surveys and in-depth interviews, the Commission will build a profile of the attitudes and successful practices of the

participating institutions in order to identify "best practices" that could be shared with/replicated by other campuses.

The study will provide an in-depth examination of the attitudes and beliefs of the senior academic leaders at these institutions, probing them for their goals and objectives. The in-depth interviews will also document the range of institutional approaches used by those who have been the most successful in introducing online course and programs to their institutions. Special attention will be paid to the barriers that had to be overcome and the strategies used. These responses can then be compared to those from institutions that are not as far along the path of online learning implementation, to see what lessons can be applied to their situation.

A second aspect of the study will be the first detailed cross-institutional examination of faculty attitudes and beliefs towards online learning. Faculty represent the second major constituency (after senior academic leaders) that are critical to the building a high-quality online learning program. Both national studies and single-institutional examinations have demonstrated that faculty attitudes are critical to the growth of any online learning program. There is, however, a large vacuum of reliable information on the exact nature of faculty attitudes and their influences.

IX. DISCUSSION AND CONCLUSIONS

Online education is clearly growing as a major component within America's institutions of higher education. Through two linked studies—one qualitative, one quantitative—we have found that many of the Presidents or Chancellors are still in the process of discovering the potential of online learning as a strategic asset. Within the academic community, senior administrators and faculty have their own and varied views as to the potential of online learning as a means of educating students.

If online learning is to flourish and develop to its fullest potential, it might be helpful for the academic administrators and faculty to understand the views of the Presidents and Chancellors as in most institutions, they are the primary policy makers.

Over the last two years, the qualitative interviews of Presidents and Chancellors have demonstrated that, with some variation, they possess a reasonable knowledge of online learning and they look on it as a strategic asset, especially given the presence of a strategic problem or goal that online approaches might address. That being the case, interview discussions with presidents and chancellors often turned to the most efficient utilization of distributed education and its overall costs.

Following the qualitative interviews, NASULGC, in cooperation with the Alfred P. Sloan Foundation appointed a National Commission on Online Learning. The commission then conducted a quantitative, nationwide survey of presidents and chancellors, targeting the more than 200 NASULGC Institutions. Now, the data and insights gained from these two studies are being utilized to stimulate a national dialogue amongst university leaders to raise awareness of the potential of online learning as a strategic asset.

At present, the Commission has held or has planned over fifteen dialogue events, including many associated with significant national gatherings such as: NASULGC's Annual Meeting; NASULGC's Commission on Extension, Continuing Education and Public Service; National Association for Equal Opportunity in Higher Education Presidential Peer Seminar; NASULGC's Council on Academic Affairs;

and NASULGC's Council of 1890's Presidents and Chancellors, American-Indian Higher Education Consortium Annual Meeting and American Council on Education Annual Meeting.

These dialogue events typically involve a panel of presidents and other members of the NASULGC-Sloan Commission presenting the results of the qualitative and quantitative surveys as reported in their white paper. The meeting participants then discuss their views and experiences with online learning, best practices, barriers, and what information the commission might provide to assist them in using online learning as a strategic asset.

Of particular interest to the readers of this special issue will be the presidents' and chancellors' on-going, strong affirmation for the importance of online education as a means for "increasing student access," along with a significant desire to "attract students from outside the traditional service area." Such a view is not without policy implications. And although the term "access" was not defined in detail for the respondents, commentary provided in both the qualitative and quantitative studies show that university leaders are clearly moving beyond a mindset which links distributed education primarily to recruitment and financial gain, and more commonly viewing access in broader ways. This view of the present and future of online education clearly impacts discussions across the college or university on topics of financial aid, transfer credit acceptance, minorities, academic continuity, student services, and transnational education—and will engender policy development and debate for years to come.

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