

## The College of New Jersey Information Technology

To: Nadine Stern, VP for Information Technology & Enrollment Support Services

Purpose: End-of-Year Status Report

Submitted: Lynn Braender, Academic Computing Advisor

### Introduction

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The position of Academic Computer Advisor was first introduced in the Fall of 2005 by the Vice President of Information Technology and Enrollment Support Services (IT/ESS), Nadine Stern. Her vision was to create a partnership between Information Technology and the academic units it supports by enhancing communication and the flow of ideas between these two groups. To meet this vision, the Academic Computing Advisor meets regularly with faculty, leaders in the academic community, and IT staff to discuss issues relating to academic computing.

Initially, Dr. Tom Hagedorn from Mathematics and Statistics held this position followed by Dr. Felicia Steele from English. Each Academic Computing Advisor holds the position for a two-year period with reassigned time of one course per academic year. I accepted this position at the beginning of the 2007-2008 academic year; my term will end at the end of spring 2009.

This end-of-year report will identify my activities to date as Academic Computing Advisor and the emerging issues, I believe, that are confronting TCNJ.

### 2007-2008 Activities

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The majority of my time spent in this role has been dedicated to identifying some challenges and opportunities in the academic community with regards to technology. This has led to many conversations with deans and their supporting staff, individual faculty, departments, standing committees, ad hoc committees and councils. I have also hosted webcasts and workshops and learned much from professional conferences (e.g., Educause, NJEdge, and NMC). The following is a discussion of this work.

- Academic Leaders - To ensure the effective relationship and open communication between IT and the academic community, the Academic Computing Advisor is expected to regularly attend monthly meetings with Jeff Kerswill, Director of User Support Services, and one dean (we meet with deans on a rotating schedule). One meeting is scheduled per month and may include supporting staff from the respective school. In

each meeting, we discuss current and future IT needs. I've also attended the Dean's Council meetings with Nadine Stern and Jeff Kerswill to discuss high-level IT issues.

- IT Leaders - I've met regularly with Nadine Stern, VP for IT & Enrollment Support Services (IT/ESS), and Pat Pasinski, Executive Assistant to the VP (IT/ESS). During this time, we update one another on the conversations we've had with members of the TCNJ community and the issues facing the college. I have also met with key IT staff, including Jeff Kerswill, Director of User Support Services (USS), Craig Kapp, Assistant Director of (USS), and Shawn Sivy, Dir of Network & Technical Services, to discuss issues relating to IT and the academic community.
- Faculty - As the Academic Computing Advisor, I've met with the faculty from the Nursing department, the Music department, and the assessment team from the School of Business. In addition, I've met with a team of faculty, management, staff, and administration about the possibilities of applying for external grants.
- ITPC - As the Academic Computing Advisor, I have attended bi-weekly Information Technology Planning Council meetings. This interdisciplinary council, with members from IT, SGA, academia and administration, discuss issues facing this college and provides recommendations to the VP of IT & ESS on these issues. I have also led a subcommittee for this council that examined academic computing resources at TCNJ and how they compare to other peer and aspirant schools. The goal for this task force was to investigate the competitive nature of IT usage within the college and report its findings back to this council.
- Teaching/Learning Task Force - As the Academic Computing Advisor, I was a member of the Teaching/Learning Initiative taskforce established in the 2007-2008 academic year by Beth Paul, Interim Provost. The task force was charged with exploring the need for a Teaching and Learning center. My responsibility was to identify the role academic computing would play in this center.
- Faculty Data Systems Committee - As a result of the conversations Jeff Kerswill and I had with many academic leaders, it became clear that many of the academic units were struggling with the assessment and reporting needs of accreditation. The information requirements for accreditation were enormous and the academic units were barely keeping their heads above water. To support these efforts, Nadine Stern formed the Faculty Data Systems Committee to investigate the needs of the various academic units and to identify a unified model for meeting accreditation reporting requirements. Representation from all areas needing faculty data was included in this committee. As the Academic Computing Advisor, I am a member of this ad hoc committee led by Paula Maas, Acting Executive Director of Institutional Research and Craig Kapp, Assistant Director of User Support Services (USS).

- Conferences - In addition to speaking with key members of the campus community, I have also attended the NJEDge Fall conference, NJEDge Faculty Showcase, the 2008 New Media Consortium Summer Conference, and have coordinated and attended the webcast on "Education in Exponential Times: How Technology-Enabled Change is Reshaping Higher Education"
- Workshops - With the financial support from Nadine Stern and Beth Paul, and assistance from Craig Kapp, I have developed two Lunch'n Learn workshops for the Spring 2008 semester. These workshops provided introductory knowledge to faculty on using technology to enhance communication with students and designing courses to use technology to support team work. Both workshops were well attended and feedback was positive.

## Emerging Issues

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### Internet2: Music

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Nadine Stern and her staff developed an Internet2 pipeline to the campus and have searched for opportunities for faculty to use it. Because of the lack of use of this pipeline and the need for greater bandwidth for Resnet and Administrative systems, some Internet2 bandwidth was reallocated to these systems. In response, however, to a statement made by Nadine Stern about the value of Internet2, faculty and staff members from the music department came forth with a proposal about streaming in five live performances from the Philadelphia Orchestra. Initially, the music faculty and staff suggested that the performances should occur in the Mayo music building, but, after further analysis, this would not be optimal solution. The acoustics in Kendall Hall are far superior for an orchestra and, because of the changes needed to the communication systems of either building in order for these performances to take place, it would be wiser to make these changes to Kendall Hall.

Conversations between Teresa Marrin Nakra, Richard Kroth, and me have occurred on this proposal. Subsequent conversations about the technical requirements and possibilities ensued with Taras Pavlovsky, Dean Library/Interim Dean A & C, Shawn Sivy, Andrew Brunetto, User Support Services Manager, Richard Rose, Computer Graphics Technician, Jon Bannan, Professional Services Specialist from USS, and Brad Coburn, Assoc Dir of Communication Technologies. There are many technical challenges with bringing in this concert series to The College of New Jersey. We can overcome some of these challenges but it is still questionable whether or not we would be able to obtain enough bandwidth from our Internet2 connection with NJEDge, TCNJ's Internet2 provider. Conversations with NJEDge have occurred and possibilities will continue to be explored.

### Action

Shawn Sivy and I will continue exploring technical solutions with NJEDge. There may be a slight possibility that NJEDge will be capable of providing a short burst of Internet2 bandwidth to the college for these performances. To support this, we may need to investigate possible

funding sources (e.g., NSF) to pay for larger bandwidth. Music faculty, to date, are not interested in pursuing funding opportunities. To be successful, we may need to look to others areas on campus for help (e.g., Grants, Public Affairs). In addition, we will need Administration to allow us to temporarily redirect some Internet bandwidth from Resnet and other systems for these performances. Performances usually occur Friday afternoons and Thursday evenings.

A solution will not appear quickly, if at all, on this endeavor. But, if it does, TCNJ will be one of the first colleges to host an internationally acclaimed orchestra with cutting-edge technology. The benefits of such an event could be enormous and bring great publicity to the college.

### Internet2: Sports

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There is an affiliate to the Sarnoff Corporation located in West Windsor, NJ that is currently developing a system that would record sports events for Division 3 colleges and broadcast these events over Internet2. These smart recording systems are self directed and need minimal human support. If installed at TCNJ, they would allow alumni, family and friends to watch our students compete at home games. I contacted Jon Bannan, Professional Services Specialist from USS, about the possibilities for this broadcasting system; Jon contacted faculty in the appropriate academic units. Unfortunately, he could not rouse any interest.

### Action

The college will eventually need to broadcast its sports events over the Internet. At some point it will be expected of us. Regardless of this, the goodwill created by broadcasted sports events is great. The college should explore this technology and find a champion to support it. This champion should be someone from athletics.

### Colleagues Committed to Redesign (C<sup>2</sup>R)

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Beth Paul requested that I coordinate efforts for the college to apply for the C<sup>2</sup>R grant from The National Center for Academic Transformation. To accomplish this goal, we need to first identify one multi-sectional course that could be transformed to incorporate the teaching models created by NCAT. These models bring technology into the classroom and the learning environment. Discussions have begun with interested faculty including Bob Anderson, Assistant Provost of Liberal Learning, Rosa Zagari-Marinzoli, Assistant Dean from the School of Culture & Society, Craig Kapp, and Taras Pavlovsky, Dean of the Library and Interim Dean of School of the Arts & Communication. Jeff Osborne, Dean of the School of Science, faculty from the math department, and Susan Albertine, Dean of the School of Culture & Society, have also stated an interest in this grant.

### Action

Because of the change in college leadership, efforts on this project have been suspended. I have been advised to wait on this project until the new provost determines whether or not the

college will provide the commitment (e.g., financial and academic resources) needed to secure this grant.

### Faculty Technical Knowledge

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During my conversations with Deans, Assistant Deans, and campus leaders, I discovered that there is a perception that faculty knowledge of current and emerging technological tools, applications, and issues in their area is stagnant. This perception was also discussed in the conferences that I attended. Many TCNJ leaders see the technological and cultural gap between faculty and students growing. With dwindling resources and increasing demands on faculty time, we need to develop effective strategies to enhance faculty academic computing knowledge.

### Action

With dwindling resources and increasing demands on faculty time, TCNJ leaders are attempting to develop effective strategies to enhance the academic computing knowledge of faculty. Academic leaders have agreed that any approach must be multifaceted. Some suggestions are listed below.

- ✓ Early Adopters of Technology - Identify, encourage, and support early adopters of technology. Ensure that early adopters have knowledge of local and online resources that support continuing education. Examples of this type of resource could be the conferences and focus groups supported by NJEDdge and webcasts provided by Educause and the Society for College and University Planning. Have these early adopters speak to our college community about their experiences through campus workshops.
- ✓ Focus Groups – These groups may be a means of supporting interdisciplinary conversations, providing a learning mechanism to faculty, and spurring innovative academic uses of emerging technologies (e.g. Wiki builders, Internet2, etc.).
- ✓ Guest Speakers – Schools, programs, and groups need to bring in speakers from outside the college to discuss specific technological issues (as compared to global or high level topics) that affect them directly. The school has enjoyed success with internal presentations and workshops; we need to complement this activity with leaders from peer and aspirant schools, and, from industry. We should also take advantage of local information technology conferences such as NJEDdge and webcasts.
- ✓ Workshops - During the 2008-2009 academic year, I hope to run a series of Lunch'n Learn workshops including workshops that are basic and others that are more advanced. I will also search for new educational opportunities from web conferences, campus affiliation with professional organizations such as Educause and NJEDdge.

- ✓ Podcasts, webcasts, and web conferences are also emerging as an effective learning environment that allows people to attend workshops from their home or office. The college could rely more on these to reduce travelling costs and increase the knowledge of its community. Whenever possible, I will also identify and promote podcasts and webcasts through the faculty discussion list.

## Ethics and Security

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Technology creates new ethical challenges that require our community to act responsibly, professionally, and intelligently. We need to build a culture that requires the academic community to prepare students to live and work in a techno-community and to behave in ways that support TCNJ's vision. To address this issue, I applied for and received an IT mini-grant that will build an online learning environment for TCNJ students. To date, a student worker has been hired to assist with the design and development process. In addition, experts in the IT field helped to identify the best environment to support the educational goals of this project. The beta version will be employed in the School of Business during the Fall 2008 semester in its Freshman Seminar classes and its Introduction to Information Systems classes.

### Action

We hope to learn from this website and make enhancements or revisions based upon lessons learned. We will also require students to take a pre and post test so that the effectiveness of the learning environment can be measured. If proven successful, we can look for other areas at TCNJ to employ this site.

## Assessment

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There is an increasing demand being placed on schools to assess the quality of their programs and processes. Currently, there is no shared effort to identify assessment requirements or solutions across all schools at TCNJ. For example, the School of Education has successfully employed SOCS to manage and run this process. Unfortunately, it has reached a point where their IT requirements surpass the capabilities of SOCS. Conversely, the School of Engineering has developed their own database system to maintain their assessment data. And now, the School of Business is in the process of purchasing a system that could assist them. If each school continues down this course, and others follow, the college will be unable to centralize assessment information. The development of future systems designed to consolidate this information will be difficult and costly.

### Action

It is critical that the college set a strategy to integrate all assessment activity into one system. To address this, conversations with key individuals are occurring. Nadine Stern, along with her staff, Deans, and, administrators have met and will continue to discuss issues relating to this crucial area. In addition, the following activities are occurring:

- ✓ Nadine Stern has developed an inclusive task force, known as the Faculty Data Systems Committee, to identify data requirements. This taskforce, led by Paula Maas and Craig Kapp, have met twice and is currently identifying requirements and possible technical solutions.
- ✓ Jeff Kerswill is planning a Dean's Council Meeting to educate them on the assessment capabilities currently available in SOCS
- ✓ Craig Kapp and Paula Maas have extended an invitation to all assessment committees on campus to demonstrate SOCS' capabilities and to discover user needs not currently supported by SOCS. They have met with the School of Business and are actively working with the School of Education.
- ✓ Craig Kapp and I spoke about SOCS assessment capabilities at the second Lunch'n Learn presentation and the Spring ITS workshop. Future workshops can be planned.

### Funding and Resources

To stay competitive, the college, schools, and programs will need more money to fund their future information technology needs. The budget for IT has been reduced in recent years and it appears it will continue to operate with a minimalistic approach. The college needs to identify creative ways to fund individual, interdisciplinary, and school projects. To date, the IT department is funding mini-grants; this process has earned favorable feedback from faculty, administration and external constituents. In addition, many of these mini-grants are involving students in research, thereby supporting the college's goal to provide students with research opportunities. If the college wishes to spur innovation in academic computing and raise the technological skill, knowledge, and usage of its community, it needs to continue funding these mini-grants. With greater demands for resources by the school, funds from this pool may be at risk of being absorbed back into general funds. This must not happen.

Schools will also need to fund special projects involving technology. Some may be small; for instance, a laptop with docking capabilities for a new faculty and technologically skilled faculty. Some may be large; for instance, creating or renovating a lab to support an innovative program or purchasing GPS systems for students travelling into unsafe communities for projects, journalistic endeavors, and service. The college needs to create alumni and industry donation opportunities to fund special projects.

Some of our academic units do not have the technical resources and computer labs needed to provide a technically-savvy learning program. Because of this, they often need to schedule classes and learning activities outside their building. Nursing is a good example of this. Because the computer labs are in other buildings, the school housing the lab has a sense of ownership for that lab. Nursing is often bumped out of the lab at the beginning of a semester; they then need to scramble to find other accommodations. When reserving a lab outside of their building, nursing faculty often discovers someone else using the room. This is not an IT

problem but a scheduling and academic one. Administration needs to assure academic units like Nursing that they have priority over some lab on specific days of the week. The college should also consider creating a secure testing lab to reduce our reliance on paper and provide courses and programs with the ability to provide online testing.

### Action

The level of discussion needed to address this funding and resource issues lies with administration. Nadine Stern and Pat Pasinski have been recently made aware of the computer lab problem and have initiated conversations with the appropriate academic leaders.

### SOCS – Simple Online Courseware System

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SOCS, the college's course management system, has proven to be enormously successful. Craig Kapp, with the assistance of John Kuiphoff, Instructional Technology Coordinator/Web Developer, has created a course management system that enhances the learning environment at TCNJ. They've successfully incorporated new technology into SOCS and have significantly influenced the use of technology in our academic environment. The college's success with SOCS can be seen by the enormous strains placed on this system. To maintain this success, the college needs to continue funding and expanding SOCS or move to a commercial system that provides advanced capabilities.

### Action

As conversations continue on campus about assessment, new requirements for SOCS will be identified.

### Document Management and E-Collaboration

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Schools, programs, and committees need to be able to manage formal documents. Collaboration across these groups is extremely important and can only be effectively facilitated by an online document management system. In addition, we need to set up a shared environment that allows faculty and students to identify others working in related research areas or areas of interest. We need to capitalize on emerging Internet technology to create a virtual environment that enhances the efficiencies of research, teaching and learning.

### Action

I will ask Jeff Kerswill to place this discussion item on the Deans' Council agenda. I will also ask Pat Pasinski to place this discussion item on future agendas for ITPC.

### Concluding Remarks

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Due to the many conversations that have occurred at TCNJ over the past year, many challenges and opportunities in academic computing have been identified. During this time, I have come to appreciate the amount of effort, skill, thoughtfulness, and caring that emits from

our IT staff. They spend an enormous amount of time ensuring that the college runs smoothly and that technology is available to the academic community. I've also come to appreciate the academic computing advisor position and the bridging effect it can create between the academic community and IT.

During the past year, a number of initiatives have begun. For instance, the formation of the Faculty Data Systems Committee to investigate the assessment needs of the college; the formation of the Teaching and Learning Task Force that examined, in part, a partnership with academia and IT to provide learning opportunities for faculty; the development of the Lunch'n Learn workshops geared to improving IT knowledge in the academic environment; and, the development of an online educational environment built for students to learn about acting ethically and safely in cyberspace.

We still have much to do. The pace of academic change in technology related areas is accelerating. It is a daunting task for the computer savvy person to keep up with this pace; it would be impossible for a teacher not trained in computers to be adept in technology without strong support and direction from the college. We must find cost-efficient ways to bring technical knowledge to the campus and provide opportunities for non-technical faculty to incorporate it into their classroom. We must maintain a competitive edge with our peer institutions, many of whom have a stronger funding opportunity.