

Learning in a Technology-Rich Environment: Division of Undergraduate Affairs Assessment

The following is a summary of UGA program directors' and partner's responses to questions concerning technology enhanced learning or learning in a technology – rich environment. The purpose of this summary is to provide information on how UGA programs and their partners are currently using technology as well as how they are currently assessing or how they could in the future assess the effects of technology on student learning and development. The UGA program directors' and partners' individual responses to these questions follow the summary.

How do the various UGA programs and partners use technology within their program?

Technology usage ranges across the various UGA programs. Several programs reported using it more administratively or indirectly such as a means for communicating with students through e-mail. Other programs use technology as a means of delivering services, such as virtual advising, virtual tutoring, and virtual new student orientation.

Assessment plans and closing the loop reports are documented electronically. Resources for training faculty and administrators about assessment are provided on the web as well as in person. In addition, on-line resources for assessment are also provided.

How are you currently assessing technology's impact on student learning and development?

Several programs reported they are not currently assessing technology's impact on student learning and development due to their use of technology indirectly or administratively. Other programs are in various stages of their assessment. Two programs, First Year College and New Student Orientation, have worked with the Information Technology (IT) Division to explore how students think, feel, and react to the computing environment at NC State University.

First Year College Students and **New Student Orientation** Counselors were assessed through a variety of assessment methods including; focus groups, surveys, and skills-self assessment in the spring and fall of 2002. According to Dr. Martin's (Director of the Information Technology Division) report summary, students in the focus group reported a "wide variation in level of technical proficiency, having at least one class that required online homework/quizzes, and communicating with instructors through email." In addition, students in the focus groups reported that NC State provides a "potentially confusing, but strong computing environment for students." Students in their skills self-assessment reported knowing how to "use e-mail, browse the web, and using basic OS features." Students also reported being "less certain about creating web pages, maintaining up-to-date and anti-virus software, and using presentation software."

In addition, the IT Division also reported results from University Planning and Analysis (UPA) surveys. These results included that "freshman rank the development of computer skills

first among the 13 general education goals, but fifth out of 13 in current development.” In addition, IT reported from UPA data that “the percentage of new students who rate themselves as having “low” or “very low” computer skill levels is declining, but was still at 9.5% in Summer 2001.”

The **Virtual Advising** program reported using a survey to assess what students’ have learned through virtual advising. A summary of the Virtual Advising program’s assessment results will be forthcoming.

What are your plans to assess technology’s impact on student learning in the future or how do you think you could assess technology’s impact if you are not currently assessing it?

If LITRE determines that technology literacy competencies are to be a focus of the work with technology enhanced learning, then UGA will have a role in its assessment. Should this come to fruition, then once the LITRE committee works with CUE and other appropriate groups to determine the technological literacy skills required of all students for admittance into NC State and/or upon graduation, UGA will have a roll in assisting with the evaluation of these competencies through undergraduate academic program review or GER assessment, whichever is most appropriate.

In other UGA areas, **New Student Orientation** continues to work with information Technology (IT) and Registration and Records to determine if students have learned information regarding responsible computer use and are able to utilize the university’s registration systems.

For those programs, who reported they are currently not assessing technology’s impact, several reported they were not “sure” how they would assess technology or if it was applicable to their program. The **Cooperative Education Program**, who is not currently assessing technology, stated they could assess whether the chat room technology is increasing the contact between students, coordinators, and the curriculum. Specifically, they could look at the number of contacts and variety of contacts.

For those programs, who are currently assessing technology, they reported a variety of different methods to assess technology’s impact on student learning and development. **First Year College** is continuing to work with the IT Division to conduct a screening of students’ technology skills and provide evening sessions for those students who need skill building.

Detailed Unit Summaries

Following are more details about each unit’s plans for assessment of technology-enhanced learning.

New Student Orientation

Using Technology to Enhance Student Technological Literacy:

During all New Student Orientation programs, prospective students are provided information on the university’s policies regarding responsible computer use. Information Technology (IT) leads this discussion and Orientation Counselors are responsible for

responding to questions during small group meetings. New Student Orientation has identified a formal outcome as part of their annual assessment plan. They review each outcome related to technology with IT representatives prior to the summer orientation programs for first year and transfer students.

Using Technology to Enhance Student Access and Opportunities to Learning?

During all New Student Orientation programs, prospective students are provided information regarding how to access and utilize the university's registration systems. The office of Registration and Records (R&R) leads this training session and Orientation Counselors are responsible for providing additional information during small group meetings. New Student Orientation has identified a formal outcome as part of their annual assessment plan. They review each outcome related to technology and course registration with Registration and Records representatives prior to the summer orientation programs for first year and transfer students.

New Student Orientation has a new interactive website that allows prospective student to navigate through the university system and collect information needed to prepare for their arrival to campus. New Student Orientation has also developed a web-based orientation program, called NSO *Explorer* to compliment the traditional orientation experience. Satisfaction levels have been collected and tabulated, but learning outcomes have not been developed. The New Student Orientation staff will continue to review this and determine if this tool will serve more as an information resource versus a developmental learning tool.

The New Student Orientation Virtual Orientation Counselor Program is in full swing. Counselors continue to respond to questions from parents and students across the country. Students are able to chat with Virtual Orientation Counselors in real-time so students may have their most pressing questions answered immediately. The RightNow software that New Student Orientation recently purchased will allow for a more structured system to collect information and data. Although the service is currently available to students, it was considered to be in its pilot stage in Fall 2003. New Student Orientation expects full implementation in Spring 2004. They anticipate that this new software will allow their office to have a better understanding of students' learning and satisfaction.

New Student Orientation will also be implementing a new system called *Ask The Pack* Frequently Asked Questions database management system that allows students to search for needed information by topic, keywords and phrases. Students will have the ability to find information online or to ask a Virtual Orientation Counselor for assistance. This software has a sophisticated reporting system that will allow New Student Orientation to determine what students have learned through the use of this system. New Student Orientation is currently developing surveys to be completed by users and should be expected in a pilot stage in Spring 2004.

Using Technology to Measure Students' Actual Enhanced Learning via Technology:

Not currently measured. Students do not participate in any sort of online assessment screening before they attend New Student Orientation.

Tutorial Center

Using Technology to Enhance Student Technological Literacy:

Although the Undergraduate Tutorial Center (UTC) does not measure technology use during tutorials, our tutors report frequent use of calculators and/or computer applications, when equipment is available. Course work increasingly requires calculator and computer applications, such as: Word applications, graphing and business applications, Web assignments, Maple and Internet applications. Tutors work with students on such course work, integrating technology applications when available and relevant to the material.

Since Spring 2003, the UTC has offered Computer Science drop in assistance for 100-200 level computer science courses. The drop in assistance is currently available for approximately eight hours each week in a computer lab, during the fall and spring semesters. Computer science tutoring is available also in our Weekly Assigned and Sign Up programs. All above tutorials are expected to make use of technology during tutorials.

In Summer 2003, ITD drafted a proposal that would address the need to offer just-in-time support for students having difficulty with software applications. This proposal suggested a partnership with the Undergraduate Tutorial Center, the primary provider of tutorial services for NCSU's campus. At ITD's request, the UTC surveyed approximately 75 tutors, who work for various tutorial programs, requesting information about how many technology questions arise in tutorials and which applications they involve. The overwhelming response by tutors was that very few technology questions arise in tutorials. Those questions that were asked of tutors related to very specific computer applications, such as WebAssign, MAPLE or graphing calculator applications. The UTC reported this information to ITD, who will decide how to proceed. In addition, a link off the UTC's homepage was added that connects students directly with ITD's email address.

Using Technology to Enhance Student Access and Opportunities to Learning:

The UTC's web page provides information about all our programs and connects students with links to all other tutorial centers across campus. The website also lists UTC happenings, including continued training workshops and extra SI sessions. Beginning in Summer 2003, the UTC unveiled an online request form for students seeking tutors. This application allows students to request tutors from any computer with Internet access, whereas they previously had to fill out paperwork in our office.

The UTC professional staff relies heavily upon email for correspondence with students and tutors. Email functions allow us to inform students and tutors regarding their assignments, eliminating the need to leave phone messages or speak with individuals in person. Tutors are encouraged to conduct their correspondence with students via email, copying the UTC on such correspondence. This has greatly enhanced communication between our tutors and the UTC staff. Tutors also correspond with their supervisors via email, allowing for more frequent contact than staff meetings or training sessions.

Within tutoring sessions, two computers in our main location, Leazer Hall, are available for students' use during tutorials. These computers are equipped with Kurzweill and JAWS, two

computer applications supported by DSS. We also provide access to a magnifying machine for the reading of hard copy materials. Plans are in place to move Walk In Tutoring Services (WITS) to USTL in Fall 2004, allowing students access to 11 computers. Additionally, computers are available in most Writing and Speaking Tutorial Services (WSTS) satellite locations.

The Supplemental Instruction program makes use of our campus television access, providing SI sessions in some subject areas for broadcast to the campus residential community.

Writing and Speaking Tutorial Services provides a television/VCR unit for students who wish to view videotaped presentations with a tutor for assistance with the development of presentation skills.

The tutor training program makes use of video technology each semester as tutors videotape tutorial sessions for self-reflection and supervision evaluation. Additionally, the UTC produces and uses video of model tutorial sessions. Tutors receive feedback from their students through an online survey we administer toward the end of each fall and spring semester.

Using Technology to Measure Students' Actual Enhanced Learning via Technology:
Not currently measured.

First Year College (Jessie Henninger and Andrea Atkin)

For the past two summers, the Information Technology Division's IT Fluency Group (comprised of Stan North-Martin, Sarah Noell-Nicholos, and Laura Grady) has partnered with the First Year College to provide a questionnaire pertaining to technology to incoming FYC freshmen during New Student Orientation. A copy of the questionnaire has been attached to this message in PDF format. The results of the survey are on the web at: <http://www.nscu.edu/fyc/training>.

(Click on the link in red marked NEW). The results are only viewable in Internet Explorer.

ITD and FYC first conceived of this project in the summer of 2002, when we created a pilot technology-training program for new students. We surveyed them during the Orientation period to get at least some idea of how comfortable they were using certain technologies. Sarah, Stan, Laura, and I collaborated to formulate the questions originally in the Spring of 2002.

Our intentions with regards to the survey were to get a ballpark idea of the students' comfort levels, so that we could plan workshops that would take place during the first two weeks of school to target areas in which they were least comfortable. We ended up planning two weeks' worth in evening sessions for students based on the survey, which were not well-attended—a total of only 6 students came to any of the sessions. We did share the results of the survey with each FYC advisor, so that they would know if there were particular students who might benefit from this type of training and could be encouraged to attend.

ITD partnered with FYC to offer Focus Groups for FYC students that would be a part of the FYC Forum Series. These Focus Groups aimed to evaluate the usefulness of the evening training sessions.

Feedback from students in these Focus Groups showed us that students were fairly comfortable with asking for help on specific computer-related issues when they needed it, and would rather ask for help as they went along rather than sitting through an additional training session on, for example, how to check your e-mail. ITD has responded to this feedback by providing additional staff in the Laundry Building Computing Facility so that students can ask specific questions on an as-needed basis.

We gave the same questionnaire to FYC students who went through New Student Orientation during the summer of 2003 so that we could see how this year's freshmen compared to last year's freshmen, and that comparison is evident in the charts at the URL above.

We also did a report on this program (and about FYC and technology in general) via a questionnaire from the SACS committee that Arnold Bell had passed on to me—I believe it was sometime this past summer. I shared my report on the questionnaire for the SACS committee with Andrea Atkins and Marc Gainey before I passed it in. Jude Davis and Stan North-Martin of ITD both offered feedback to me upon reading my responses to the SACS questionnaire. I believe I could still get a copy from Jude in the case that you need my responses to those questions as well.

This past year incoming students were again given the technology questionnaire. Results showed that the students are coming in with so much more tech familiarity that we don't have to offer special sessions or workshops for them. Instructors have access to materials that Jessie put together to help students with things like PowerPoint and we provide information about print quota, etc in the text for MDS, T.H.E. Workbook. Two advisers, Andrea Atkin & Marc Gainey, make frequent use of technology-based assignments in their MDS class sections. For example, students create PowerPoint presentations, use the Internet for researching majors and careers, and use the course web page for assignments. Other advisers use the results of the technology questionnaire to identify students early in the semester that may need more personal attention in navigating the NC State computer system.

Undergraduate Research

Although the Office of Undergraduate Research is not directly involved in classroom teaching, or in the mentoring of research, it does maintain a comprehensive website that, if used by students, can enable them to find research opportunities on or off campus, to find internships, funding sources for semester or summer research projects, and to find up-coming workshops on topics ranging from “How to give a Poster Presentation” to “How to apply to graduate school.” The website, <http://www.ncsu.edu/undergrad-research/>, also promotes local and national symposia, mini web-based courses that support undergraduate research, and provides mentors with best practices information and tools for assisting students. Regular visits to the website can be beneficial in positioning the student for excellent national research opportunities and funding, as well as for admission to graduate programs. A database is being established that will enable Undergraduate Affairs to gather information directly from both students and mentors who fill out

electronic forms as a way to find one another (student looking for a project; mentor seeking undergraduate researchers). To support the assessment of the student-mentor relationship, the database also includes evaluations of mentors by the students and evaluation of the students by the mentors.

Technology is not being assessed using the Undergraduate Research website; however, when the new database that is built upon information filed by the student and the research mentor is completed, it will be possible to establish whether or not the website is enabling more undergraduates to become involved in research both on and off campus. The database will also include an evaluation form for students to comment on their experiences and for mentors to do the same.

Advising Central (Virtual Advising Center)

Using Technology to Enhance Student Technological Literacy?

No outcome for enhancing student technological literacy has been identified by Advising Central to help educate students as to how to use computers. The types of technological tasks necessary to use and get information from Advising Central's website are generally considered very elementary by today's technologically literate students.

However, in the design of the Advising Central website currently in use and in future additions or changes, usability studies have been/are being done with appropriate student samples to ensure that the additions are technologically usable and the content is appropriate for the intended audience.

Using Technology to Enhance Student Access and Opportunities to Learn?

Inherent in our mission and purpose are improving access and opportunities for students. We intend to provide information for students who are not able to find who they are looking for, to locate their adviser, or physically be on campus. All of the information provided through the Advising Central website is also accessible by advisers. This allows accurate and consistent information to be passed onto students, thereby enhancing the students' experiences here at NC State, both academic and personal.

Advising Central's website uses many different means to address opportunities to learn and access to information. By compiling important information into centralized locations, Advising Central aims to minimize the amount of time and effort students have to take to find information, and therefore, enhance access. This compilation was done to make consolidated lists for contact people such as the departmental Coordinators of Advising (http://www.ncsu.edu/advising_central/advisers.html), for information about majors and minors (http://www.ncsu.edu/advising_central/curriculum.html), for academic events around campus (http://www.ncsu.edu/advising_central/whats_new.html) and for pertinent links of academic information (http://www.ncsu.edu/advising_central/links.html).

For the purpose of enhancing the academic experience that both prospective and current students encounter when they study here at NC State, Advising Central provides advertisements of new & under publicized courses and has a database of over 250 frequently asked questions. All of these informative pages are available 24 hours a day, 7 days a week.

Additional information is provided to students through technologically enhanced communication with advisers, both peer and professional. Advising Central has a sophisticated chat or instant messaging option, which students may choose for a quick answer, there is also an e-mail option for those subjects less time sensitive.

Advising Central is also planning to design and offer a course to transfer students who have been accepted to a major here. Some of the campus policies will expect a certain level of knowledge from transfer students when they arrive on campus. Therefore, Advising Central feels that by providing early access to information such as how to complete plans of work and read degree audits, among other things, this course will be improve access to campus policy and regulation information and ease the transition and enhance of their educational experience once they get here.

Using technology to measure students' actual enhanced learning via technology?

Though no assessment has taken place as of yet, the new assessment plans addresses the intended outcomes that measure the learning and development of students who use our services. Through an online survey tool, Advising Central will distribute and collect information about the established learning outcomes. The survey has been designed and will be disseminated by the beginning of April. Further assessment of learning and development outcomes will be performed but not necessarily through the use of technology.

The University Honors Program (Larry Blanton)

How does the University Honors Program use technology within their program?

Technology is playing an increasingly significant role in the administrative aspects of the University Honors Program (UHP). Our web site (<http://honors.ncsu.edu>) helps prospective students learn about our programs. We have implemented an on-line application process. Our admissions process is becoming increasingly on-line. The program web site serves to provide the students participating in the program with policy information, alerts them to new opportunities (e.g., we have recently begun an on-line listing of Extension & Engagement opportunities associated with a new course we have created: HON 397: Honors Extension & Engagement), and hosts a popular bulletin board. We are building a dynamic student records system that will not only make our honors advising more effective, but also give students the ability to monitor their program progress on-line. We see technology as the key to maintaining effectiveness as we increase the number of students in the UHP.

The UHP also has a curricular role, offering special seminars and other courses for its students. Technology impacts for those have mainly been to inform students of our seminar

offerings and alert them to the new courses and related opportunities. The individual HON seminar instructors employ technology to varying degrees in their courses.

How are you currently assessing technology's impact on student learning and development?

We monitor web site usage and implement web site changes in response to student and faculty input.

What are your plans to assess technology's impact on student learning in the future or how do you think you could assess technology's impact if you are not currently assessing it?

Course evaluations and program surveys will include questions concerning technology and its effect upon perception of the program. Our HON seminars provide opportunities to test innovative teaching strategies. We are endeavoring to develop seminars that interface with ongoing research efforts and technology will likely be a key component of those seminars. Appropriate assessment will be at the core of such efforts.

Assessment will also be a critical component of some of our new HON courses, such as Honors Extension & Engagement and Honors Cooperative Education. These are not traditional cultures, but assessment will be the key to assuring that they are academic experiences. It is difficult to predict the roles technology will play in these courses, since each experience will be unique. However, at the very least technology will help to inform students of opportunities, provide on-line access to applications and information, and serve as a convenient means of monitoring student progress in their projects.

Coop, Transition Program and Academic Support Programs for student athletes all reported that their program has not changed in terms of the use of assessment of technology.

Finally, the Instruction Technology Division reported that their ideal assessment plan would be to conduct an online assessment screening before students attend orientation to measure their skill level in technology and then provide resources to those students requiring training. If students are unable to complete the skills assessment before orientation, they could complete the assessment then during orientation. In addition, they would assess what technology faculty are currently using and their expectations of students' use of technology. Finally, they would assess students' skills level and understanding of technology when graduating from NC State.

**UGA Directors Responses to the Learning in a Technology-Rich Environment Question:
*How do you use technology and how would you assess technology's impact on student learning and development in your program if applicable?***

Undergraduate Research (Director, Dr. George Barthalmus's response):

Although the Office of Undergraduate Research is not directly involved in classroom teaching, or in the mentoring of research, it does maintain a comprehensive website that, if used by students, can enable them to find research opportunities on or off campus, to find internships, funding sources for semester or summer research projects, and to find up-coming workshops on topics ranging from "How to give a Poster Presentation," to "How to apply to graduate school." The website, <http://www.ncsu.edu/undergrad-research/>, also promotes local and national symposia, mini web-based courses that support undergraduate research, and provides mentors with best practices information and tools for assisting students. Regular visits to the website can be beneficial in positioning the student for excellent national research opportunities and funding, as well as for admission to graduate programs. A database is being established that will enable Undergraduate Affairs to gather information directly from both students and mentors who fill out electronic forms as a way to find one another (student looking for a project; mentor seeking undergraduate researchers).

New Student Orientation (Former Director, Dr. Roger Callanan – response updated by Interim Director, Roxanna McGraw):

New Student Orientation has an interactive website that allows prospective students to navigate through the university system and collect information needed to prepare for their arrival to campus. The New Student Orientation website is very extensive and includes useful information from representatives and departments across campus. A new feature that will be implemented in Spring 2003 is the *Ask The Pack* Frequently Asked Questions database system. This system will allow students to search for information by topic, keywords or phrases. The design and features of this system allows students to find all the necessary information they will need to know about their participation and attendance at New Student Orientation and their adjustment to campus life. Virtual Orientation Counselors are also available to chat with prospective students in real-time so students may have their most pressing questions answered immediately.

New Student Orientation continues to improve and expand a web-based tool called *NSO Explorer*. The *NSO Explorer* was developed to compliment the actual interpersonal orientation experience. The assessment related to this tool is more focused on the students' satisfaction rather than learning outcomes. The New Student Orientation staff will continue to review this and determine if this tool will serve more as an information resource versus a developmental learning tool. Under development are online surveys that New Student Orientation will be able to broadcast to students to assess the students' satisfaction with *Ask The Pack* Frequently Asked Questions, *Chat With Us* and the Virtual Orientation Counselor Program.

First Year College (Director, Dr. John Ambrose's response):

The whole idea of students needing to be computer literate is not new. There has been no real guidelines at the University level, each college has developed their own set of standards for their students. FYC looks across campus and determines what computer skills students are expected to have for the various curriculums. FYC then tries to prepare students for the skills needed according to the curriculum they have chosen. In the fall, FYC is working with IT to do a screening of students' technology skills and then providing evening sessions to bring students up to speed if needed. In the last few years, MDS 101 classes have placed more emphasis on technology more so than others part of this depends on the instructors themselves. In addition, the students in the MDS 101D sections are using the Project 2000 database. This is a monitoring tool in which students enter their syllabi, grades, and progress, which provides information to advisors and the student concerning their progress in their various classes. A peer/mentoring system is in place to assist students with the entry of their information. This program is without problems such as licensing issues and computer availability. All FYC students also complete several standardized instruments on the web such as the Meyers-Briggs and the Strong Interest inventory. Technology in general is wonderful but is vulnerable. The correct support needs to be in place for faculty, staff, and students.

Co-Op Program (Director, Dr. Arnold Bell's response):

Currently, we are using technology more administratively. We plan to incorporate it more in use with students such as chat rooms and emails to touch base with students. In terms of assessment, we would assess whether the chat room technology is increasing the contact between students, the coordinators, and the curriculum. Specifically, we would look at the number of contacts and variety of contacts. We will need assessment resources for technology but first the program staff would need to plan and discuss what we want to assess.

Transition Program (Director, Mr. Roger Mimm's response):

Technology or the evaluation of technology is more a part of the overall education process for the entire University. It is not really applicable to the Transition program. We work within the system. If technological skills are required or proven to be beneficial for a student, we will teach students to use them rather than creating them. We try to use existing tools or system rather than create computer skills. We do use power point. We do send students' assignments through email and communicate with students through email. It has really become more a traditional learning process rather than any technological breakthroughs.

Academic Support Program for Athletes (Edward Reid, LAN Technician)

I have just gone to a roundtable discussion with TLTR (Teaching Learning Technology Roundtable) where we talked about how to make the university website more accessible to students with vision impairment. I am going to adapt the ASPSA website within the standard that they have suggested. We also have the Kurzweil program on two machines for students

with learning disability. Also at the meeting, I was given a software program that will evaluate our website.

I need some other people on campus outside of ASPSA to look at where we are at technology wise and make recommendations. I am now on the TLTR Listserv; this is one way that ASPSA is becoming more involved with the technology enhanced learning on campus. We are finding out more about evaluating our technology, perhaps by having a small group look at us twice a year or once a quarter.

Virtual Advising Program (Director, Dr. Andrea Irby's response):

I use technology all the time. It is the essence of our existence and advising program. I would use the Survey to ask students questions about what they learned from our site. I would follow some users' throughout their time here and compare groups of users/non users in terms of academic success, time in major, time to degree, retention, and graduation.

Undergraduate Tutorial Center (Former Director, Dr. Ken Gattis – response updated by Director, Melissa Daniel):

Our primary technology use is through the administrative functions within the UTC. Our web page provides information about all our programs; connects students with links to all other tutorial centers across campus and features an online request form from students seeking tutors. Additionally, the UTC professional staff relies heavily upon email for correspondence with students and tutors. In addition, tutors are encouraged to conduct their correspondence with students via email, copying the UTC on such correspondence. We are currently in the process of researching computer applications that would perform some of our administrative duties, thus allowing us more time for face-to-face interactions with students and tutors.

Within tutoring sessions, two computers in our main location, Leazer Hall, are available for students' use during tutorials. These computers are equipped with Kurzweill and JAWS, two computer applications supported by DSS. Additionally, we provide access to a magnifying machine for the reading of hard copy materials. The Supplemental Instruction program makes use of our campus television access, providing SI sessions in some subject areas for broadcast to the campus residential community. Writing and Speaking Tutorial Services provides a television/VCR unit for students who wish to view videotaped presentations with a tutor for assistance with the development of presentation skills and most satellite locations have computers. Plans are in place to move Walk In Tutoring Services (WITS) to 150 USTL in Fall 2004, allowing students access to 11 computers.

We piloted virtual tutoring options in 2001 for students enrolled in distance education, with little success. We continue to research and explore virtual tutoring technology, with hopes of finding a computer program that will be versatile enough to meet the needs of students in various subjects with differing technology backgrounds.

The tutor training program makes use of video technology each semester as tutors videotape tutorial sessions for self-reflection and supervisor evaluation. Additionally, the UTC

produces and uses videos of model tutorial sessions. Tutors receive feedback from their students through an online survey we administer toward the end of each fall and spring semester.

Understanding the Assessment of Technology Enhanced Learning in Undergraduate Affairs

Interview Protocol &
Responses with Stan North Martin and Laura Grady

Introduction

As you may be aware, the new SACS accreditation guidelines require an institution to submit a Quality Enhancement Plan (QEP) at the beginning of the tenth year. (See <http://www.sacscoc.org/pdf/Proposed%20Principles%20of%20Accreditation.pdf> for more details) As I understand, NC State has chosen to focus their QEP on understanding Technology Enhanced Learning. In order to prepare for our (UGA's) role in the QEP, we want to understand how UGA and its partners are engaging in Technology Enhanced Learning (TEL) and we want to understand how TEL is being assessed. Thus, in order to better understand all this, I need a moment of your time to ask you some question.

1) How would you define technology-enhanced learning?

Technology enhanced learning refers to when you use technology—usually some electronic means--to help augment what is already being presented to students. It adds a component to the learning culture that is intended to enhance the subject matter, either by making it easier to understand or broadening the range of subject matter available to improve learning potential. It is a way in which pedagogy can be improved. It is not meant to block learning or frustrate either the faculty or the students. The discipline is still being taught but you are using technology as a tool to facilitate the teaching process. It is the means, not the ends. Learning is a life-long process and individuals have a variety of learning styles. Technology can provide alternative means for student learning while enriching and encouraging greater learning.

2) Are you currently involved in any projects that involve technology enhanced learning? If so, please describe them.

The Information Technology Division currently supports using technology to enhance learning. They provide technology training for faculty, staff, and graduate students to use technology in the classroom. They also provide online tutorials for the campus community. In addition, they provide support and training for how to use technology at NC State for undergraduate students as well. They traditionally provide training for undergraduates during New Student Orientation. Upon request they have provided technology training to students in classes such as the FYC MDS 101/102 courses. Specifically, they provide training on how to use the Unity computing environment, creating web pages, etc. They plan to offer in the fall of 2003 two weeks of an open lab with staff for students to come and ask questions concerning computing resources on campus. This work stems from a compact plan in which one of the goals is to provide students with a base level of understanding for technology literacy. A long-

term goal then is to provide students with technology fluency once they have acquired this basic understanding of technology literacy. The unit currently uses technology to teach technology. They use technology to provide support to the student enabling them to use the computing resources and other tools available.

3) *How are you assessing TEL?*

They are currently using New Student Orientation's surveys conducted at the end of orientation to assess their programming in which they use technology to teach about technology. They also currently use UPA data from several UPA questionnaires including the freshman, sophomore, and senior surveys. The freshman survey finds out specifically what their expectations are in terms of using technology at NC State.

In the future they plan to do skills assessment of student coming into NC State. Currently, they use self-reports of students' technology skills. The long-term goal is to find out what skills students bring with them to NC State and what skills faculty expects them to have or acquire. In addition, assess lower level courses as to what training they are providing to students in using technology and the methods in which they are conducting this training. To begin to address these questions, they recently conducted focus groups with New Student Orientation counselors and students in the First Year College to get some feedback on the general computing environment. A portion of the focus group explored how instructors were utilizing technology in their classes and what students' felt about that use.

While not directly related to TEL, the annual ResNet survey does provide some useful data that is related to students' perceptions of how having convenient high-speed data connectivity available affects their ability to get their course work done. Previous surveys have also asked whether ResNet enhanced communication with other students, with instructors and with student services staff.

4) *If you are not assessing TEL, how do you plan to assess it?*

The ideal assessment plan would be to an online assessment screening before incoming students come to orientation to measure students' skill level in technology and then provide resources to those students requiring training. If unable to complete before orientation, students could complete the assessment then. In addition, assess what technology faculty are currently using and their expectations of students' use of technology. Finally, assess students' skills level and understanding of technology when graduating from NC State.

5) *Are you in need of any assessment resources in order to assess TEL?*

Yes. They are currently looking for best practices in technology-enhanced learning and for what other universities are currently engaging in regard to technology-enhanced learning. They would like help in the process of designing the online assessment to ensure that their questions are being answered and asked so they will be generalizable. In addition, they would like resources then to analyze the results of the developed instrument. Finally they would like help in getting access to faculty and students to complete the online survey and would like to join in a

team effort with LTS, UGA, and Library Services to accomplish this assessment so that resources are being combined instead of being repeated.