Academic Technology (AT), a directorate within Tufts Computing and Communications Services (TCCS) is a university-wide resource that provides guidance and professional advice on using instructional technology in support of teaching and research initiatives. Through on-site consultations, AT’s three groups — Curricular Technologies, Faculty Development and Support, and Research and Scientific Computing — work with the schools and faculty on how to integrate technology to further their educational and research objectives.

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The AT Help Desk provides faculty with individual help on questions related to the use of instructional technology.

ATHelp: 617-627-2451 or athelp@tufts.edu

Cognitive Desiderata: Answering the Question Before Choosing the Technology

By Paula Vincini

People often confuse what I do as an instructional designer by placing an emphasis on the technology as in, “What do you think about using Tablet PCs and PDAs in the classroom? Which do you prefer?” I try to explain that what I do is provide a bridge in understanding between an instructor’s choice of pedagogy including its underlying instructional goals and learning objectives and technology.

What is an instructional technology? Sometimes the underlying ‘technology’ can be the same as an information technology. Email, discussion tools, and blogs can all be used for informational or instructional purposes. One could argue that a course management system, such as Blackboard, that is only used to upload course documents, inform students about grades or provide space for announcements is being used as an information technology and not as an instructional technology.

A recent article in Syllabus magazine, “The Newest Media and a Principled Approach for Integrating Technology into Instruction,” featured seven fundamental questions that staff at the Eberly Center for Teaching Excellence and the Office of Technology for Education at Carnegie Mellon ask faculty before recommending any instructional technology. The authors term each of these questions “cognitive desiderata” for new teaching strategies and each is supported by current knowledge from cognitive and learning sciences. I have paraphrased these questions below as they are similar to where I like to begin discussions with Tufts faculty.

1. What is the need, problem or gap? Or “In the best of all possible worlds, what would you like to see happening in terms of learning with your students?”
Although faculty sometimes express a desire to try out a specific technology, it is important to determine whether that is the appropriate technology for learning to occur.

2. Do you want to assess students’ prior knowledge? If yes, do you do so only to attain relevant information about student weaknesses or misconceptions and/or would you like to provide assistance and feedback to students in gaining the necessary knowledge and skills?

3. Do you want to enhance students’ organization of information in order to help with flexible retrieval and meaning?

4. Do you want students to focus their time and energy on practice with “underlying principles, theories, models, and processes and not the superficial features of a problem?”

5. Do you want to provide your students with “frequent, timely, and constructive feedback, given that learning requires accurate information on one’s misconceptions, misunderstandings, and weaknesses?”

6. Do you want your students to acquire proficiency in metacognitive skills — selectively monitoring, evaluating and adjusting their learning strategies?

7. Do you want to try to address some of the diverse learning needs of students with different educational backgrounds and “preferred methods of learning”?

Depending on your answer to the above questions, many instructional technologies exist that can help you implement your goals. However, the important starting point is never the technology, but choosing the instructional method that can be implemented more efficiently through appropriate instructional technology.

Paula Vincini is an instructional designer with over 20 years of teaching and training experience in post-secondary education.
Pedagogy into Instructional Technology: An Interview with Nick Laudato

By Pauline Stieff

Dr. Nicholas C. Laudato was a featured speaker at Academic Technology’s Second Annual Summer Institute in May 2004. In his presentations on “New And Emerging Instructional Technologies” and “A Virtual Tour of the Center for Instructional Development and Distance Education (CIDDE)” at the University of Pittsburgh (Pitt), he describes how Pitt has blended centralized and distributed support mechanisms to create a faculty support system that is collaborative, comprehensive and effective.

As the Associate Director for Instructional Technology of CIDDE, he directs and coordinates seven functional areas that support the application of technology to instruction: Instructional Computing, Instructional Media Services, Electronic Graphics and Design, Photography and Electronic Imaging Services, Video Production, Classroom Engineering and the Faculty Instructional Development Lab, a New Media Center.

Dr. Laudato earned his BS in Mathematics from Carnegie-Mellon University in 1972 and his Ph.D. in Curriculum and Supervision from Pitt in 1975. He regularly teaches graduate and undergraduate courses in the School of Information Sciences, and has also taught at the Katz Graduate School of Business, the College of Business Administration, the School of Education, the University External Studies Program, and the University of Pittsburgh at Bradford.

Dr. Laudato’s view of the use of instructional technology to support instructional designs is evident in his diverse experience. He believes that in order to expand and improve the use of technology in higher education, colleges and universities need to bring faculty on board early in the process of further integrating technology into the curriculum. Many faculty consider technology a bureaucratic imposition. By placing more value on faculty input, anticipating problems and viewing the technology integration as a collaborative endeavor, it will be easier to combat faculty resistance.

Laudato continued, “We need to convince faculty how technology can help them to better organize courses. Technology can create positive change in the classroom and implement a more interactive environment. It can help to take the pressure off covering all course material in class and extend discussion outside the classroom. Shy students often feel more comfortable responding within an online discussion group forum and such forums also allow for more student reflection.”

Technology can ultimately improve courses by changing strategies and decreasing learning barriers and difficulties. However, Laudato states faculty need to be supported through both one-on-one assistance for training and routine technology problems as well through the provision of opportunities to share with faculty on their own campuses and at other institutions. “Faculty must feel as if they are being recognized for incorporating technology into their work.”

Dr. Laudato previously held positions as Associate Director of the University External Studies Program as well as Project Director and Manager of User Support Services within the centralized Computing and Information Services at the University of Pittsburgh. He successfully managed the implementation of the Integrated Student Information System across the University’s four Regional Campuses.

During 1993–1994, Dr. Laudato served as a manager of the five-person Information Architecture and Process Innovation Project, charged with defining an enterprise-wide information architecture and a methodology for conducting business process reengineering. He has documented this project in a series of presentations and papers delivered to CAUSE.

In addition to his work at Pitt, Dr. Laudato serves as Senior IT Executive and Instructional Technologist with CampusWorks Inc, an information technology and operations management consultancy to higher education. With CampusWorks, he has led major IT strategic and tactical planning efforts at dozens of campuses nationwide, and has substantial experience planning and implementing change and creating instructional technology teaching and learning models.

Instructional design requiring the use of instructional technology provides for an emerging field in higher education. Dr. Laudato has presented at the annual EDUCAUSE conference and at the New Media Consortium (NMC), the Consortium of College and University Media Centers (CCUMC), EduComm, and the American Educational Research Association (AERA) national conferences. He actively participates in the Learning Technology Consortium, the Pittsburgh Council of Higher Education, and the Pittsburgh Blackboard Users Group. These groups promote collaborations between universities and include those beyond the isolated groups within a single discipline.

Dr. Laudato viewed AT’s Summer Institute as the beginning of such collaborations and presents an opportunity to show faculty what types of technologies and services are available to them. “In order to make an impact, many faculty need to catch up with the technology and colleges and universities need to provide reliable services 24/7, integrate technology with current systems and manage content provided by faculty.” He stated that we need to encourage faculty to document work, create web pages, exchange information. Faculty and technology department staffs need to change their attitudes about the restrictions of technology and instead change services to make better use of both human and technology resources, to be flexible enough to address on-going curriculum needs.

Pauline Stieff, Grants Specialist in Academic Technology, is a writer with extensive development experience in the non-profit sector.
**Technology Assistance at Tufts**

Compiled by Rebecca Sholes

**General Information**
http://inside.tufts.edu/support/

**Using the Web for Teaching**

**Who do I contact to help me put my course materials online?**

Two online course environments are supported here at Tufts, Blackboard and the Tufts University Science Knowledgebase (TUSK).

- **BlackBoard** is a course environment that is used by many institutions to support face-to-face delivery of courses and also to deliver courses wholly online.

**Tufts Administrator for Blackboard**
Neal Hirsig, Assistant Director, Information Technology Services
Phone: 617.627.4026
Email: nhirsig@tufts.edu
http://ase.tufts.edu/its/academic/blackboard.asp

- **TUSK** is a password-protected, multimedia database containing full-text syllabi, slides, lecture recordings (audio and video) and notes, exam questions, evaluation forms, bibliographies linked to full-text articles, and other resources made available by faculty. TUSK provides course materials for the Medical, Dental, Nutrition, Health Communications and Veterinary Schools.

To get help, training, or to become a TUSK contributor contact your school’s curriculum office, the TUSK User Support team (listed below) or email tusk@tufts.edu:

**TUSK User Support Team**
Elaine Almeida, elaine.almeida@tufts.edu
Stephen Simon, stephen.simon@tufts.edu
Phone: 617.636.2969

**School of Medicine**
Carolyn McVoy, Associate Dean Educational Affairs
Phone: 617.636.6650
E-mail: carolyn.mcvoy@tufts.edu

**School of Dental Medicine**
Gail Kasuba, Administrative Coordinator Academic Services
Phone: 617.636.0352
E-mail: gail.kasuba@tufts.edu

**School of Veterinary Medicine**
Library Curricular Support
Margot Thompson, Library Curricular Support Specialist
Phone: 508.839.8717
E-mail: margot.thompson@tufts.edu

**Who can assist me in getting my course materials into the right format for putting online?**

Facilities are available on each of Tufts three campuses to assist faculty in converting audio and video files to streaming media and scanning course materials to digital format. For more information on specific services, contact:

**Medford Campus**
Neal Hirsig, Assistant Director, Information Technology Services
Phone: 617.627.4026
Email: nhirsig@tufts.edu

**Boston Campus**
Meghan Nordman
Administrative Curriculum Coordinator
Phone: 617.636.6650
E-mail: meghan.nordman@tufts.edu

**Grafton Campus**
Andrew Cunningham, Director of Media Services
Phone: 508.887.4837
E-mail: andrew.cunningham@tufts.edu

**Who can assist me in getting copyright permission for the course materials that I want to put online?**

A faculty member is responsible for getting copyright permission for materials that s/he wants to put online. Tufts copyright policy is available at: http://www.library.tufts.edu/fairuse/ However, if you are using an article from a database that the Tufts libraries have a license to, you do not need to get copyright permission for that article. You can provide a direct link to the full text article in the database.

For more information on how to do this go to: http://www.library.tufts.edu/tisch/ra/blackboardindex.htm

**Technology & Teaching**

**Who can help me with ideas for instructional strategies that use technology?**

Paula Vincini, AT’s Instructional Design Specialist, assists faculty in integrating technology into the teaching and learning process. She researches instructional design theories and learning theories to find the appropriate framework to fit the instructor’s instructional and project goals and to develop effective learning experiences for students. Paula can be reached at paula.vincini@tufts.edu or x72451.

**Video Conferencing**

I would like my class to participate in a discussion with a class in Peru. Who do I contact to set up the video conference?

Video conferencing services are available on the Boston, Medford, and Grafton campuses. For more information on video conferencing go to: http://www.tufts.edu/tccs/s-videoconferencing.html

To schedule use of the video conferencing facilities contact:

**Medford Campus**
Chris Moores, Telecommunications Coordinator
Phone: 617.627.5945
E-mail: chris.moores@tufts.edu

**Boston Campus**
EdMedia
Phone: 617.636.0931
E-mail: Edmedia-av@tufts.edu

**Grafton Campus**
Grafton Information Technology Services
http://vet.tufts.edu/gcs/
Phone:508.839.8777
Email: chris.jackson@tufts.edu
November

APT Grant Workshop
Wednesday, November 17
2pm–4pm
TUSM
Sackler, Room 309
Boston Campus

APT Grant Workshop
Monday, November 22
10am–12pm
Mayer Administration Building
Kohnstamm Conference Room
Grafton Campus

December

Tufts University Teaching
and Learning Conference
Is Everybody Learning?:
Teaching in a Diverse
Classroom
Friday, December 10
8am–3pm
Cabot International Center
at Fletcher School of Law
and Diplomacy
Medford Campus

February 2005
Next Issue of “Innovations
In Learning” Newsletter

Happy Holidays!

Webcast

I have a guest speaker who can present from his office in Colorado. Who handles webcasting at Tufts?
Webcasting services are available on all three Tufts campuses. To set up a webcast contact:

Boston and Medford Campuses
EdMedia
Phone: 617.636.0931
Email: Edmedia-av@tufts.edu

Grafton Campus
Grafton Information Technology Services
http://vet.tufts.edu/gcs/
Phone: 508.839.8777
Email: chris.jackson@tufts.edu

Rebecca Sholes is the Faculty Development Coordinator in Academic Technology and a graduate of the Fletcher School of Law and Diplomacy.

APT Faculty Grant
2005 RFP Available

The 2005 Request for Proposals (RFP) for A Partnership in Technology (APT), AT’s Faculty Grant Program is now available. APT is an internal grants program for faculty projects experimenting with the use of instructional technology for teaching, learning and research. The program is designed to leverage Tufts’ technology resources to create a partnership between faculty and Academic Technology staff.

Under this program recipients are partnered with a team from Academic Technology’s three groups: Curricular Technology Group (CTG), Faculty Development and Support (FDS), and Research and Scientific Computing (RSC) who will provide assistance with project design, management and development throughout the one year grant period.

Each grantee will receive up to 600 hours of AT staff time over the grant year. Such grant support will include assisting with project management, design, and development as well as assistance in transitioning the project to become a suitable proposal for larger, external funding sources.

To apply for the grant, AT applicants must submit a one-two page Letter of Intent containing the project title and description and outlining the problems and challenges technology would help to solve.

The funding cycle for the grant program is 12 months. Grant support will begin either on July 1 or October 1, 2005 and end on June 30 or September 30, 2006. The (required) letter of intent deadline is due February 15, 2005; final proposal deadline is April 15, 2005.

For more information about the program and to download the RFP, go to: http://at.tccs.tufts.edu/services/grant-assistance/internal-grants/