

VCU TEACHING

A publication from the Virginia Commonwealth University Center for Teaching Excellence



Volume 1, Number 2

Fall, 2003

CTE VITAL Workshop Series

Fall 2003

- ◆ October 15 — Creating and Grading Written Assignments
- ◆ November 12 — Course Evaluations and Learning Assessments

Winter Institute

- ◆ January 14, (9:00-3:30) "Infusing Technology into your Courses"
 - Blackboard
 - Low-Threshold Software
 - Merlot
 - Universal Design

Spring 2004

- ◆ February 18 — Developing and Assessing Critical Thinking Skills in Students
- ◆ March 24 — Generating and Leading Group Discussions
- ◆ April 14 — Writing Test Questions and Creating Exams

For more information,
call the CTE at:
(804) 827-0838

The Center for Teaching Excellence is now entering its third full year of operation. In that time, with the help of many generous faculty, we have developed an array of programs and opportunities to improve teaching and overall faculty development at Virginia Commonwealth University. It has been my pleasure to visit many of you throughout the campus in our VITAL workshops, our school targeted workshops, and through consultations. I wanted to take this opportunity to inform you of some of the newest activities and services the CTE is offering.

This year we have begun a Junior Faculty Mentoring Program. This is an integrated program of activities throughout the academic year. The Center has coordinated with six schools and the college to find mentors for 25 junior faculty. We will be doing seven workshops for these faculty and meeting with them periodically this academic year. Later in the semester they will be given the opportunity to participate in the Student Technology Expert's Program (STEP), which will link a student with a faculty member to infuse more technology into their courses. This is an exciting initiative that is being funded by the Provost as well as the Medical Campus and we look forward to institutionalizing the program in the future.

The CTE is also involved in a major new grant out of the college entitled, "Project PRISM: Producing Results In Science and in Math." The 1.82 million dollar grant will advance undergraduate education in science and math through faculty development, academic programs, technology, and student services. The CTE's role will be to work with faculty to develop skills in implementing active learning and collaborative learning techniques.

Also new this semester, we have extended our hours of operation. The CTE is open until 7pm Monday through Thursday so that adjunct faculty may utilize our center before their night classes. Copying, faxing, telephones and computer workstations are all available here on the third floor of the Cabell library.

We will continue all the programs that have been successful for the past two years. One of our most popular programs, the CTE Small Grants Program, is now accepting applications until November 3. It is through this program that we support the scholarship of teaching at VCU and it is through this newsletter, VCU Teaching, that we will feature some of the projects that were recently funded. Many of the final reports of the previously funded grants are located on the CTE website.

Members of the CTE mailing list will receive the benefit of first notification when we announce new or upcoming events. If you would like to be on the mailing list, you can do so by visiting our website at <http://www.vcu.edu/cte> or by contacting us directly at cte@vcu.edu.

Best Regards,

Joseph Marolla, Director, CTE



CTE Resources and Services

- ◆ CTE Website
- ◆ CTE Mailing List
- ◆ VCU Teaching Newsletter
- ◆ National Online Newsletters
 - The Teaching Professor
 - Online Classroom
 - The National Teaching and Learning Forum
- ◆ Small Grants Program
- ◆ CTE Junior Faculty Mentoring Program
 - STEP Program
- ◆ VITAL Workshop Series
 - Mobile Workshops
- ◆ Brown Bag Lunch Series
- ◆ SmartForce (now Skill Soft)
 - New courses are now available
- ◆ CTE Library
- ◆ Hardware/Software acquisitions, loans, and training
- ◆ Consultations
- ◆ Lecture video—taping and reviewing
- ◆ Classroom observations and reviewing
- ◆ Teaching portfolios

CTE GRANT HELPS TO GET MEDICAL IMAGES ON THE WEB

By Brenda Seago, M.L.S., M.A., CBIL Director

Do you have stacks of slides all over your desk and in your drawers? Are they good quality, originals, classic cases or examples? Do you have trouble finding them when you need to pull them together for a lecture? Slides probably represent thousands of untapped resources for teaching. How can all the slides be organized?

With a grant from the CTE, the School of Medicine put together a pilot project to display 75 high-quality, original histology images on the web and make them available for teaching purposes. John Bigbee, Ph.D. and Alice Pakurar, Ph.D., from the Department of Anatomy and Neurobiology, provided the images. An indexing system was developed, using the Medical Subject Heading (MeSH) model from the National Library of Medicine. Canto Cumulus software was used to display images through a web interface. The copyright for the images is held by VCU, so all faculty have access rights to the images through the web interface. Faculty at VCU can download the images for use in PowerPoint presentations, or label and use them in classroom teaching or for other instructional purposes.

The production for the image collection is by Susan Deihl, M.F.A., Rounddoor Studios; VCU Creative Services; Brenda Seago, M.L.S., M.A., Director, Computer Based Instruction Lab (CBIL) and Chris Stephens, Director, Educational Applications Development, both from the Office of Faculty and Instructional Development, VCU School of Medicine.

Please take a look at the collection at <http://www.cbil.vcu.edu/hls> and see how these images might enhance your teaching. If you are interested in adding your images to the collection, please contact Brenda Seago at blseago@vcu.edu or 828-3914.

VIRTUAL MODELS, BETTER LEARNING

By "Annie" Kai I. Cheang, Pharm.D., Department of Pharmacy

Although research on web-based teaching in the pharmacy curriculum is still in its infancy, available data suggest that the internet medium facilitates delivery of instructional materials and enables learning beyond the classroom setting. Furthermore, technology in the classroom helps to prepare students for a high-tech workplace. In light of these benefits, the School of Pharmacy has set a goal to implement a digital curriculum and web presence within the curriculum.

The Advanced Cardiovascular Pharmacotherapy course is a third-year elective offered in the four-year Doctor of Pharmacy program. The course focuses on cardiovascular diseases and drug therapy, especially those used in the acute-care setting. Although students enrolled in this course have a general background in pharmacology and linear disease processes, they do not have experience in complex disease concepts involving multiple components that interact with each other simultaneously, such as cardiovascular hemodynamics. Since complex physiological concepts and processes are hard to demonstrate in a static medium in the traditional classroom (e.g. in print or figures), funding was obtained from the Center of Teaching Excellence Small Grant Program to evaluate whether student learning of complex hemodynamic concepts can be facilitated via the use of online Macromedia Flash animations and interactive models.

In this project, hemodynamic concepts were introduced in the traditional classroom as in previous years. *In addition*, students were also required to log on to Blackboard asynchronously and view some of the same hemodynamic concepts already presented in a static format in class. However, in BlackBoard, the hemodynamic models were presented via Flash animations and interactive exercises.

Quiz grades improved when complex hemodynamic concepts were presented both in class and were accessible via online Flash animations, compared to when the materials were presented in class only. In a student survey, 80% of the students indicated that their learning of hemodynamic concepts improved by viewing the online animated models, and 86% of the students indicated that the availability of online animations were important to their course experience. These online animation models also allowed students to access and review the materials at their convenience. Improved understanding of the concepts also allowed the instructor to incorporate students' online learning into active case discussions and problem solving during class time.

This project has created great interest among the School of Pharmacy faculty. The Flash animations and interactive learning environment form one model of future web-based cardiovascular and critical care teaching in the curriculum. It can also be applied to other complex disease states in any body system. Development of a digital curriculum is a defined goal in the School of Pharmacy and the Department of Pharmacy's strategic plan. Given, that every course in the curriculum currently has a BlackBoard website, development of interactive contents to facilitate learning will further enrich the digital learning environment, and complement the School's lap-top initiative.

UNIVERSAL DESIGN FOR LEARNING (UDL) PROVIDES OPPORTUNITIES FOR EFFECTIVELY REACHING DIVERSE LEARNERS



<http://www.students.vcu.edu/pda>

By Donald Finn, M.S. Ed, PDA Research Associate

Universal Design originated in the 1960's as an architectural movement. The premise guiding UD is providing physical access to facilities for the widest range of users possible. This gave rise to features like curb cuts, automatic doors, elevators and escalators, and bright lighting, each designed to make our movements easier.

In an effort to include the widest range of learners possible, educators began exploring ways to adapt Universal Design concepts into the instructional setting during the 1980's. A leader in this movement was The Center for Applied Special Technology (CAST), founded in Boston 1984. According to CAST, the driving force behind UDL is generating "curricula, teaching practices, and policies which are inherently flexible and therefore may reduce the demand on educators to develop and implement modifications and accommodations to meet individual differences within general education learning environments" (CAST.org).

Integrating UDL techniques into course design benefits learners with a variety of differences including various learning disabilities and learning styles. Curriculum materials should be diverse and should integrate materials other than a single textbook. Learning experiences should integrate supplemental readings, online learning, and multimedia elements. In short, the curriculum should offer a variety of learning opportunities and should be flexible to accommodate learner differences.

The "universal" in UDL does not indicate that one style or single methodology exists to effectively reach all learners. Rather, it means that each learner has unique learning needs and styles, and that efforts should be made to accommodate as many differences as possible. Employing UDL techniques into the classroom range from the basic and "low tech" to the expensive, involving specialized computer, scanning, and video technologies. Some of the more practical ideas include:

- Providing documents in a standard font like Times or Arial;
- Varying font colors or using highlighters to distinguish different words or sections of text;
- Making study guides, lesson summaries, and notes or note outlines available in print or online;
- Using videotapes to enhance understanding (use captioned video whenever possible);
- Integrating diagrams or other visual elements to illustrate major points and/or sequences of events.

Instructors benefit from designing courses using UDL techniques because of the array of resources and learning options they can offer to their students, typically in one convenient online location (using Blackboard or a personal web page). More information about Universal Design and practical suggestions for integrating UDL concepts into instruction will be offered at the Winter Institute cosponsored by the CTE and PDA on January 14, 2004; contact the CTE for more information.

Make Plans to Attend the CTE Winter Institute **January 14, 2004**

"Infusing Technology into your Courses"
Call the CTE at: (804) 827-0838 for more information



National Conferences on Teaching and Learning —



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The 33rd Annual Conference of the International Society for exploring Teaching and Learning

Location -- University Park Holiday Inn Hotel, Fort Collins, Colorado.

Date -- October 16-18

Contact -- Bruce Saulnier, ISETL President, Quinnipiac University, Hamden, CT 06518; (203) 582-8579; fax (203) 582-8664

World Conference on E-Learning in Corporate, Healthcare, Government, and Higher Education

Location -- Phoenix, Arizona

Date -- November 7-11

Contact -- conf@aaace.org; (757) 623-7588

Web -- <http://www.aace.org/conf>

The Recovery of Community in Higher Education

Location -- Westford, Massachusetts, Regency Conference Center

Date -- November 14

Contact -- Judith Kamber, jkamber@necc.mass.edu

Web -- <http://www.nefdc.org/>

23rd Annual Lilly Conference on College Teaching

Location -- Oxford, Ohio, Marcum Conference Center, Miami University

Date -- November 20-23

Contact -- lillyconference@muohio.edu

Web -- <http://www.units.muohio.edu/lillycon/>

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