

UNIVERSITY OF WASHINGTON
FACULTY COUNCIL ON EDUCATIONAL OUTREACH

The Faculty Council on Educational Outreach met at 10:30 a.m. on Tuesday, **January 12, 2001**. Chair Roger Simpson presided.

Approval of minutes

The minutes for December 12, 2000 were approved as corrected.

Demonstration of videoconferencing technology – Nallakkan Arvindan.

Arvindan demonstrated the “Fuel Cell Engineering,” Web-based course for Distance Learning (Chemical Engineering 498) that he designed for Autumn Quarter 2000. This is a one-of-a-kind program that Arvindan has not copyrighted and has made available to anyone who wants to use it as a template. He said there is a great demand for this kind of program in industry as well in the academic environment.

This “Virtual Tutored Video Instruction” program: overcomes constraints imposed by the quarter system; augments classroom lectures with new tools; provides a Distance Learning solution to address the needs of people of diverse backgrounds in widely disparate locations; develops new tools to create collaborative learning environments; creates universally accessible archives of information; and links students with one another.

Arvindan named as the goals of his project: to develop electronic modules that present technological information; to assemble modules into a complete virtual tutored video instruction course package that can be accessed over the Internet or by means of a CD-ROM; and to use novel tools like the “webalizer” and online surveys along with conventional methods for evaluation and assessment.

Arvindan then demonstrated his “Single Web Page Design,” which he said is “easily scaleable.” He said it was important to encompass all aspects of the Web Page on a single page.

The lecture could be viewed as if it were being presented on a television screen. Students can take notes while watching, as they would in a regular classroom. (It is thus an “active learning experience.”)

Many students who are working in industry, say, and who must view the video-lecture whenever possible, can video conference with the TA at specified times by clicking a button on the Web page or E-mail a series of questions about the lecture to the instructor later in the same day. The instructor can then reply to all the questions at once, avoiding a more time-consuming back-and-forth exchange of single queries.

The use of the video (which from one perspective is redundant: it already exists on slides) is in some measure psychological; it makes students feel that they are in a kind of classroom. It also recognizes that learning styles vary among students so that some benefit more from the video than from text or audio presentations. It was noted, however, that the video-lecture is more useful for those kinds of classes in which demonstrations play a significant role than it is for a straightforward lecture class.

Arvindan said the data in the video-lecture class is continually being buffered (or streamlined); students would never need to download 90 megabytes at once; a few megabytes would be much more likely.

Arvindan said students only need a web-browser to watch the video-lecture. They do not have to buy any expensive software.

Such “Virtual Tutored Video Instruction” programs as this are mostly used in Electrical Engineering and Computer and Information Science departments at present. This quite obviously is because the faculty in these departments, at universities throughout the country, know how to put such programs together, and how to set them up. Arvindan said such programs will appear in most academic disciplines within the next half-decade, or not long thereafter.

ASUW representative Summer Slater said most undergraduate students at UW are decidedly against Distance Learning as an instructional delivery mode to the degree that it replaces interactive, face-to-face, on-campus learning. If it is used for other purposes – to reach the normal Distance Learning target audience of professionals and other career-ensconced university graduates, and those people whose remote locations do not allow them access to the campus physically – the ASUW naturally has no objections. But, as Slater stressed, the essence of the undergraduate experience, both in and out of the classroom, is face-to-face exchange and interaction. She said another reason for ASUW concern over Distance Learning is the effort to enhance on-campus interactive diversity. The more Distance Learning is allowed to supplant regular delivery modes of instruction, the more difficult becomes the effort to enhance diversity. Though DeYoung noted that Distance Learning, in allowing people in vastly disparate locations to take the same course, actually can enhance diversity in some instances. Slater agreed, but reiterated her point that what is being sought is enhancement of diversity on campus. Finally, she said, a great many students feel that degrees achieved through Distance Learning devalue degrees achieved through residence learning.

Arvindan said the kind of video-instruction he showed the council is not meant to supplant face-to-face instruction, but to augment classroom teaching with new tools and also to make courses available to people to whom they would otherwise not be available.

Jorgensen said a crucial area where Distance Learning can be useful is “lifelong learning.” Specialized courses – with specific career-related content – can be offered to people who are not able, for a variety of reasons, to come to campus physically. It was also noted that students on campus who have a full slate can take extra courses in Distance Learning, if they so desire.

Buck said that, with respect to the variety of needs to which the University can respond, the question to be asked is: Which needs can UW best serve, and best address? He said that in Psychology at UW a core of the coursework needs to be done on campus for the department to offer the kind of degree programs it most wants to offer.

Jorgensen said a “resource issue goes along with anything we do.” He said the University gets little in the way of state funding for its programs, and is left to depend on grants and other means of funding. The University should seek industry support in the development and support of course activities that directly (or indirectly) benefit them and their present or future employees. This is particularly applicable to training and certification programs that industry now seems to want the University to develop.

Next meeting

The next FCEO meeting is set for Friday, February 9, 2001, at 9:30 a.m., in 36 Gerberding Hall.

Brian Taylor, Recorder

PRESENT: *Professors* Simpson (Chair), Buck, DeYoung, Jorgensen, Kieckhefer, Kiyak, Treser and Zoller;
ex-officio members Marcovina, Rogers and Slater.
Guest Nallakkan Arvindan, Chemical Engineering.

ABSENT: *Professors* Daniali and Jenkins.
ex-officio member Huling, Root and Szatmary.