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ACADEMIC PROGRAMS

From the Office of the Associate Dean Vol. 6 No. 3

Course Websites Components

Survey data from 1998 suggest that about one-fourth of all college courses have websites associated with them. Given the rapid infusion of technology into the academy, one suspects the percentage is much higher now. And virtually all faculty, even those of us currently without course websites, have considered the possibility. Some of us feel guilty that we are so far behind the times. And so for the entire faculty the issue of what to include on a course website is a relevant one.

Hazzan proposes eight possibilities. Some are obvious, but it is the comprehensiveness of the list that makes it valuable.

1. *Purpose of the website* - Course websites can be used to accomplish different purposes. It makes sense to design or revise yours with a purpose clearly in mind. How will putting parts of your course on the Web benefit your students? What does this kind of technology allow students to do that could not be done in some other way?

2. *Structure of the website* - Key here is the homepage of the website. Because so much is possible on the Web, instructors are well advised to consider the level of detail appropriate to the course and purpose of the website.

3. *Kind of objects to be put in the website* Consider four general categories: a) static objects like class notes designed to be read by students, b) interactive objects like simulations or experiments that give students the opportunity to work with course content, c) informative objects like links to other websites, d) communicative objects like e-mail, listservs, or electronic discussion boards.

4. *Student perspective considerations* In making any decision about a course website, consider the contents from the student perspective. In what way can the course site improve student understanding of the course content? Would the website increase student interest in the course? Do students want this additional channel of communication?

5. *Public vs. private accessibility* Should the website be public, open to anyone? Or should it be private, only available to those taking the course? Those questions relate again to purpose, but they also relate to copyright issues and how faculty and their institutions view the ownership of course materials.

6. *E-communication tools* Besides handling the administrative and logistical details of the course via e-mail, electronic discussion offers instructors and students a different way to interact. Discussion online gives students more time to think before they talk, it allows students to talk at the same time without interrupting each other, and it permits more direct

references to what others have said previously.

7. *Maintenance* Course websites need to be kept current, and that should be understood at the planning stage. But creating and maintaining course sites does have the added benefit of encouraging faculty to dedicate more time, thought, and effort to course planning issues websites make courses more public.

8. *Related links* The world of the Web is enormous. Faculty can easily get carried away linking the course website to more and still more sites. The guidelines for deciding what links to include should be the relevance to the course material and keeping the number of external links reasonable.

From an article based on the work of Orit Hazan in *The Teaching Professor*, October 2001. For assistance with Web course development, visit our website in ACES. <http://web.aces.uiuc.edu/aim/e-learning>

The Undergraduate Revolution

From an article by Ralph Mullin in *Change* September/October 2001.

The prevailing core learning process for undergraduate education is based on the course-credit model, developed circa 1890. This model was designed by administrators to track students efficiently in, through, and out of the institution just count credits or courses completed and compute a cumulative grade point average. These measures tell us nothing about students development of intellectual skills or the ability to make conceptual connections across a variety of disciplines, of course. But the purpose of the course-credit model was to increase efficiency, not effectiveness. Learning theory, or talent development, did not drive design.

The course-credit model has been accepted largely because the ease of measurement and the high degree of independence it gives to faculty and departments. It fails because: 1) institutional *purpose* (mission-in-use) is to maximize resources and reputation, not learning; 2) the *goals* for the core process goals are ill-defined, and means (courses) are taken as ends; 3) *operational definitions* and measurement of core process goals are practically nonexistent; 4) the core *learning process* is not designed for continuous assessment and improvement (this is known as the Shewhart cycle), and thus incremental improvement is infeasible; 5) the model encourages competition and discourages cooperation, thus instilling fear and driving out learning; and 6) the control structure encourages independence rather than interdependence and cooperation.

Thirty years ago Alverno College designed its system from scratch. Based on explicit assumptions about learning, it defined its *mission* to develop in students those skills and abilities they need to be successful as learners, and set an explicit set of eight abilities as system *goals*. Alvernos leaders *operationally defined* those goals and developed measures to assess the colleges success in reaching them. They developed a primary pedagogy and *learning process* capable of continuous improvement, conceptually similar to the Shewhart cycle in quality management theory. They designed a matrix structure that guided collaborative faculty work across disciplines and that facilitated integrated student development.

They required students to demonstrate competence in the eight abilities as a condition for graduation, replacing course credits and GPAs with a sophisticated performance assessment system. The Alverno system thus differs radically on at least seven system essentials: theory of organization, mission, goals, operational definitions, measurement, core process design, and structure. Alverno has built a purposeful, powerful, and integrative form of undergraduate education envisioned. (A comparison of the traditional model and the Alverno College Model appears on page 3.)

ACES Student Awards Banquet

Sunday, April 28, 2002

Park Inn Conference Center

UIUC Faculty Retreat

Thirty-three ACES faculty participated in the Annual UIUC Faculty Retreat on Active Learning in February. David Pace, Carnegie Scholar and Professor of History at Indiana University, was the keynote speaker. Pace addressed the topic of Teaching our Students to Think in the Language of our Discipline. He shared the following strategies for increasing learning in classes.

1. Define the basic learning tasks in ones discipline that students must master to succeed and break these up into their constituent parts
2. Modeling these tasks for students
3. Give students the opportunity to practice these tasks individually and in groups and to receive regular feedback on their progress
4. Assessing students mastery and retention of these skills

Shelly Schmidt, FSHN, co-presented a workshop on visualization. She and James Leake, ENG, discussed ways to help students visualize scientific processes to enhance learning.

The retreat is sponsored by the Office of the Provost and 14 other units including ACES. Kirby Barrick serves on the Executive Advisory Committee.

ACES Convocation

Sunday, May 12, 2002

Undergraduate Ceremony

9:30 a.m., Krannert Center for Performing Arts

Graduate Ceremony

10:00 a.m., Smith Music Hall

COMPARING THE QUALITY AND QUANTITY MODELS

Quality Model (Concepts from Alverno College and W. E. Deming)	Quantity Model (Course-Credit-Completion, circa 1890)
1) Organizing Principle: Graduation is contingent on the competent demonstration of a set of performance-based abilities.	1) Graduation is contingent on completion of a set of courses at a given minimum GPA.
2) Mission: The <i>mission-in-use</i> is identical to the <i>espoused mission</i> centered on student learning and development and uses the <i>talent development approach</i> .	2) The <i>espoused mission</i> may be learning, but <i>mission-in-use</i> often focuses primarily on increasing resources and reputation.
3) System Goals (Outcomes): Explicitly defined performance-based student abilities (such as knowledge, skills, and attitudes KSAs) provide a clear constitutive definition of the mission. This set is the criterion of system design and control, guiding design and coordination of curriculum and pedagogy. Comprehensive general outcomes require students to integrate knowledge, skills, and attitudes. Outcomes are determined and validated by faculty, students, alumni, employers, and others, and provide clear direction.	3) When system goals are explicit (rare), they are generally highly ambiguous. Even most degree programs are designed in terms of required courses rather than development of explicit KSAs. Lacking an explicit set of comprehensive student learning goals, individual courses evolve as discrete packets of knowledge. No mechanism provides information and feedback from various constituencies systematically.
4) Operational Definitions: Operational definitions provide communicable meaning by specifying the procedures by which ability outcomes will be assessed and measured.	4) System goals if they exist are highly ambiguous and not capable of being implemented; thus, course goals that may be operationalized cannot be systematically integrated.

<p>5) Measuring: Assessment is an integral part of a continuous process of improvement (Shewhart cycle). Student progress in the curriculum is fundamentally measured in the ability validations that students accumulate... for specific levels of performance (Loacher, Cromwell & OBrien, 1986, p. 122). Assessment center methods that use expert judgment are primary.</p>	<p>5) Tests are the primary method of measurement, with instructors evaluating content knowledge. Grades represent the level of temporary knowledge acquisition. Intellectual skills and relevant attitudes are rarely measured.</p>
<p>6) Structure: A dual responsibility structure assigns faculty members to both a functional department and to an ability outcome department. Both discipline and ability department chair form an educational policy committee, chaired by the chief academic officer. This classic matrix structure meets the high integration needs required by an outcomes driven system.</p>	<p>6) Traditional departmental structure focuses on knowledge specialization and limits coordination and integration. Because there are no systems goals to provide the basis for integration, general and major studies programs are coordinated by hierarchyactivating competition among colleges and deans. Students and faculty fail to see important relationships between the development of important intellectual skills in liberal learning and the demands of the major.</p>
<p>7) Student Focus and Motivation: Students focus on meaningful learning goals. Primary motivation is intrinsic goal achievement is realized from continuous feedback from <i>assessment-as-learning</i>. Students experience intrinsic reward whenever they demonstrate competence on the set of abilities.</p>	<p>7) Students focus on completion of individual courses. Primary motivation is extrinsic and comes from completion of courses and the degree. Students experience extrinsic reward on completing courses and at graduation.</p>
<p>8) Content Knowledge: Knowledge provides the context for all learning. Students learn by making an action out of knowledge. Knowledge must be demonstrated.</p>	<p>8) Knowledge is the focus of individual courseseldom developed in the context of general abilities, demonstrated in an active performance context, or transferred across courses.</p>

<p>9) Curriculum: Curriculum provides the means for student learning. Curriculum is unified and integrated by outcomes, creating a developmentally sequenced, logically coordinated program of courses. Curriculum should change in response to feedback and other information.</p>	<p>9) Curriculum is the end as well as the means for the learning process. No unifying principle compels connections between and across courses. Individual courses are structured by individual faculty members with limited outside interaction.</p>
<p>10) Teaching Methods: Assessment-as-learning teaching methods demand student involvement. Students learn to do rather than just learn about the course material. Students must think, judge, decide, act, and create. Students self- and peer-assess against established criteria.</p>	<p>10) Typically, professors lecture while students listen, take notes, and read the course text. Feedback to students typically is limited to test results and cursory comments. Students are inclined to be passive rather than active learners.</p>
<p>11) System Inputs & Outputs: Institutional effectiveness focuses on student development of complex abilities (system goals). Value-added is the difference between entry and exit student performance. Learning that Lasts is measured longitudinally.</p>	<p>11) Institutional effectiveness is determined by inputs and measured by standardized test scores (like, SAT, ACT, HSGPA, and HSR scores), faculty credentials, faculty-to-student ratios, and so on. Outputs are increased by increasing inputs, rather than by improving processes.</p>
<p>12) Cooperation: Cooperation is required in open social systems. Designing the system to focus faculty effort on student development compels cooperation. Faculty must work together to define expected student abilities, develop operational definitions and criteria for performance, assess student performance, and provide feedback; they must strive to analyze results, evaluate progress across courses and programs, and improve the process.</p>	<p>12) The course-credit model does not require or even encourage cooperation and interdependence. Rather, it encourages competition among faculty members and students. Students compete for grades. Faculty members rarely, if ever, collaborate to define outcomes, make curricula coherent, or assess individual student development across the curriculum.</p>

Sources (revised): Mullin, Ralph F. And George W. Wilson. A Violation of Assumptions about TQM: A Response to Jauch and Orwig. *Journal of Quality Management*, 1998, Vol. 3, No. 2, and *Learning That Lasts*, Mentkowski, 2000.

The Socratic Dialogue: Step-By-Step

By Craig A. Munns in *The Teaching Professor*, October 2001.

As anyone who has taken an introductory philosophy course can attest, the method of questioning used by Socrates is an effective way to explore ambiguous or obscure concepts. However, the method is not without difficulties; it ultimately cost Socrates his life. When it works, it offers a way to engage students with the material and to encourage them to work through concepts on their own.

The method becomes more manageable once it is thought of as six simple steps. These can be practiced whether the course is religion or business management.

1. Choose a concept to discuss where students have a superficial understanding. As a way to show the development of the idea, always write what the students say on the board.
2. Rephrase the question in order to draw out the other responses and expand the initial definition. This step serves two purposes. First, it allows you to get more information so that the first definition can be enhanced. Second, it provides a way to stimulate the conversation if no one ventures a first definition.
3. Ask how these new ideas fit in with the initial definition. Prompt them with questions about the ideas they generate, forcing them to relate what they say to the main concept.
4. Get students to combine their work into a cohesive definition. By this step students are usually involved in the discussion. Ask them to use a sentence to express the concepts they have agreed on thus far.
5. Ask for or offer test cases to determine if the definition is viable. This is the essence of the Socratic method and yet students sometimes see it as a personal challenge. Reiterate that we are trying to come up with the best overall definition. Presenting the limiting or test case as hypothetical makes them less likely to feel personally threatened.
6. Refer to the definition during the course. It is very important, especially after all the work students put into the definition, to keep referring to it throughout the semester.

Although rightfully associated with philosophy, this streamlined version of Socratic dialogue can be used successfully in many courses. I have used it in sociology where students defined values and culture, in logic where they defined truth, psychology defining consciousness, and even English composition where students worked on cause and effect. I can imagine it being used in economics to define fair distribution, biology and life, history and progress, and business management and contract. I'm certain that Socrates would not mind in the least if you appropriated his method of dialogue to enhance discussion in your discipline.

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