

TWO MODELS OF WEBSITE PEDAGOGY: THEORY AND APPLICATIONS

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ABSTRACT

A basic theoretical premise is that instructor dictated website templates, or lack thereof, facilitate different student learning strategies, faculty engagement, and products. Two models of Website Pedagogy are described: the **Tabula Rasa Model**, and the **Shell Model**. Using the **Tabula Rasa Model**, the instructor challenged students to collaboratively construct a website in the absence of a template. The efficacy of these assignments as a generative learning device over traditional classroom assignments was marked. In the **Shell Model**, students produced web-based products following a predetermined structure. They authored PowerPoint presentations for a global lectureshare, and interacted with the Blackboard web-based course management software. Each of these software/website templates influenced content generation. The templates appeared to inhibit the fullest expression of Website Pedagogy as a generative learning device. While both the **Shell and the Tabula Rasa Models** required significant technical support, the intensity and types of support differed.

THEORETICAL CONSTRUCT

Every instructional medium places demands on the person who delivers content through that medium. For example, content prepared for delivery to a university seminar must be reshaped for the lecture hall. When that same content is to be delivered through an electronic medium, further reshaping and customization is required to meet the demands of the specific electronic medium, forcing the content provider to continually interact with the material. This interaction is hypothesized to have a tutorial impact on the provider. In general, then, it is hypothesized that shaping content so that it can be delivered through a given medium is in itself a form of pedagogy. The specific theoretical perspective to be examined is that website design and construction is a form of pedagogy.

TABULA RASA MODEL - Panelist Donald Egolf:

APPLICATION 1: In the first test of this theoretical perspective, four graduate students enrolled in a graduate seminar on computer-mediated communication were observed over the course of an academic term as they worked on their group project, to develop a website dedicated to teaching public speaking skills. Each of the students had experience teaching an introductory college course on public speaking. The students were assisted by the seminar instructor and a webmaster who had extensive experience with website construction in the commercial arena. The analyses performed to test the hypothesis were qualitative in nature.

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There were three data sources: (1) All Emails about the project were sent to a distribution file which included the four students, the webmaster, and the instructor. (2) Minutes of weekly face-to-face meetings. (3) During the final seminar meeting of the term after the website was completed an evaluation session was conducted. Here the students critically evaluated the entire effort. The content of each data source was analyzed and the frequency of certain content themes were tabulated. The content analysis of the three data sources showed that the hypothesized pedagogical aspect of website construction was supported.

APPLICATION 2: In the above study it was reported that when teachers, experienced in their field, prepared a comprehensive teaching website, the teachers found the experience to be pedagogical. If constructing a website can have pedagogic effects for experts, then possibly it can have the same effects for the novice. This was the assumption tested in the present research. Specifically, one class in small group and team communication was taught using website-construction pedagogy, and a second by a traditional pedagogy. The two teaching methods were then compared using two formal evaluative criteria. Participants in the study were 60 upper-level college undergraduates, most of whom were in their final baccalaureate term. The students were divided between the two classes: 30 in the website-construction pedagogy class and 30 in the traditional pedagogy class.

The content domain to be taught in each class was the same. The traditional pedagogy class was taught through a combination of lecture, discussion, and experiential exercises. Students in the website-construction pedagogy class were assigned to one of six groups, corresponding to one of six content areas. And, each student was given a different textbook on small group and team communication to search for information on the student's assigned topic. In addition, beyond-the-textbook database searches were required. In each weekly class students had to report on the information acquired from their research and how this information might contribute to the construction of a website. In the second month of a four-month class, a webmaster began attending the class, and continued to do so for the remainder of the class. The webmaster prevented students from becoming sidetracked on the mechanics of website construction. By the end of the four-month class the six-part website was posted; it had both animation and interactive features.

To evaluate whether or not the website-construction was efficacious in teaching the topic of small group and team communication in comparison with a traditional pedagogy, two evaluative criteria were utilized. The first was a test of what small group and team communication concepts were learned. Here the same instrument was given to both classes and the results were evaluated by a 2x2 (groups vs. above or below the grand mean) chi-square analysis (chi square = 7.036. > .05). Since more website-construction scores were above the grand mean, this finding shows that the website-construction class scored significantly higher than the traditional class. The second evaluation criterion was the students' evaluation of their respective classes. The traditional pedagogy class was evaluated by an independent agency in the college. A high teacher ranking was

achieved, meaning that the comparison or traditional class was not a "straw-man" class or a class that could easily be bested by a new method, in this case the website-construction method. The students' evaluations of the website construction class were equally positive; the evaluations distinguished themselves from those of the traditional-class students in that the website group gave comments about achieving a goal, a goal they thought they would never reach. They also were proud of their product and proud to have their pictures attached to the website. Five students noted that the website-construction experience was a key factor in their securing employment--employment not as computer specialists, but in the communication field.

The above study suggests that website-construction can be a most efficacious pedagogy. It can first of all teach, it can motivate, it can provide a clear goal, and it can provide a venue for the public display of the students' work. The pedagogy requires an instructor who is very knowledgeable about the subject, and a webmaster who can quickly resolve any computer-related problems.

SHELL MODEL- Panelist Ellen Cohn:

In the Shell Model, students produce web based products following a predetermined template driven structure.

APPLICATION 1: Students interacted with the Blackboard web-based software for a variety of instructional purposes, including those previously documented by Cohn and Stoehr (2000): <http://imej.wfu.edu/articles/2000/1/04/index.asp>. Both student and faculty users were required to demonstrate computer-based competencies. Three template-organizing influences operated in sequence to produce a fairly uniform learning shell. These were the: 1. Software template 2. University computer support's template alterations, and 3. Instructor content and template selections. There were far fewer customization possibilities by students than in the "tabula rasa" model. Thus, the "shell model" of web based pedagogy style would be characterized as more learner passive, and less encouraging of student collaborative learning than the "tabula rasa" model.

APPLICATION 2: Students authored PowerPoint presentations of course content in a graduate class in cleft palate, for posting on both a global lectureshare <http://www.shrs.upmc.edu/supercourse/index.html>, and the University Blackboard web-based site. Again, the design and organizational constraints of the PowerPoint software, and the need to prepare a relatively low technology presentation for global distribution, allowed for less web-based student generative learning and creativity. For both of these applications, adequate webmaster support was essential. This was provided behind the scenes and was fairly transparent to the students. While the templates appeared to inhibit the full expression of Website Pedagogy as a generative and collaborative learning device, the Shell Model required less in-class time than did the Tabula Rasa model.