Expanding the Potential of Online Courseware in Human Service Classrooms

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Abstract: WebSTAR utilizes web-based online courseware as a portal through which students at a number of campuses across distances can collaborate around an inquiry based problem. WebSTAR provides a means of structuring that environment for both student and faculty interaction and collaboration. WebSTAR telecommunication projects were initially used to promote intercampus collaboration among teacher education faculty and their classes. Findings from these initial projects (i.e. students were eager to create items for an audience greater than their immediate class, and were anxious for positive feedback on their efforts by other campuses) are briefly summarized. Some of these findings are applicable to many university courses and suggest that the WebSTAR model would be useful across disciplines. An example of the use of the WebSTAR model in a human services course to acquaint students with the advocacy process is presented.

Introduction

During the summer of 2003, five university social studies methods professors across five different campuses embarked on a journey into the unknown. They elected to pilot a new curriculum design methodology that would stretch their abilities in collaboration, curriculum development, conceptualization of student needs, and technological skills. This new design methodology, christened WebSTAR, was co-developed by the authors to serve not only teacher educators and their classrooms but other audiences as well who find that an organized exchange across time and space of ideas and information around a central topic area would benefit their constituents. In this article, you are invited to follow their journey and others after them as WebSTAR was expanded to other users. The following narrative, examples and data included will be from the teacher educator perspective. The authors have then posited a hypothetical

example of how it might be used to acquaint undergraduate human service students with the advocacy process.

Background

University faculty members are faced with dual responsibilities in their teaching. They must not only deliver the content of their courses but also model the pedagogical, philosophical, and instructional beliefs that they espouse. Perhaps no area more explicitly demonstrates the difference between "talking the talk" and "walking the walk" than the integration of technology into teacher education courses.

Cuban (2001) notes that educators are inclined to use technology in a manner that supports existing practices rather than to inform or transform their teaching. Thus, faculty perceptions of ways to actually apply use of the Web to curriculum- based instruction still are relatively narrow. Most faculty members see the Web as an electronic database or library, and while they themselves may communicate with colleagues throughout the world electronically, they rarely see the Web as a place for their students to collaborate interuniversity. Consideration of the Web as a venue for student publication or opportunity for electronic mentoring is also limited.

The use of electronic classroom environments such as Blackboard or WebCT as either complete or supplemental classroom space is increasing. Syllabi are posted, reading assignments are discussed and assignments are deposited in drop boxes. Student collaboration within these environments has been primarily limited to intraclass work. Cuban (2001) would certainly classify this as supporting existing practice. The consideration of using the electronic classroom environments afforded by Blackboard or WebCT as a collaboration space for courses across time

and distance has been limited. This is not surprising considering the amount of negotiation involved in creating a problem-centered space and modifying long established teaching routines. Most Western educators at all levels have been trained to be "private practice teachers' (Ravitz, Becker, & Wong, 2000) implying that the more negotiation with others – be they faculty or students – during the conception and implementation of a learning activity, the more challenging that activity will be to conduct.

In consideration of this challenge of negotiation, every stage of the WebSTAR emphasized collaboration and community from the early faculty planning sessions to the actual implementation with students. The WebSTAR model suggests that faculty from multiple campuses can collaboratively identify a problem that is cross applicable to selected courses they teach. This problem is then broken down into smaller areas of inquiry for each campus to undertake within their campus node. The tasks assigned to each node require communication, collaboration and cooperation from each of the other campuses as well. Results of the inquiry areas are then shared, new information is assimilated, synthesized and reconceptualized in preparation for the final product.

Collaboration has long been held as one the basic tenets of project-based learning, central to inquiry research, organization, time and task management, design, reflection, feedback and revision, and public presentation (McGrath, 2004). Any higher education faculty and their students form a unique community. Collaboration among members of that community has long been held to be essential to knowledge building (Bruffee, 1999). Chen (2003) states that networked learning communities are an ideal site for collaborative learning as the learning process is supported by interaction within a computer network which supports students by

providing an environment "with greater motivation and opportunity to articulate, discuss and reflect on both their learning strategies and the changes within themselves."

Collaboration across space and time requires organization and forethought and differs from cooperative learning. The purpose of collaboration is to support creation of personal meaning and internalized understandings through dialogue, discussion, activity, and reflection. Collaboration within a networked learning community may be structured in a manner consistent with Reid's (1989) Collaborative Learning model. This model identifies five phases. Initially, during the *engagement* stage, a perspective or question is posed which provides the basis for the subsequent *exploration* stage during which students engage in activities exploring the question. Critical is the *transformation* stage that finds students engaged in activities that reconceptualize the information. In the *presentation* stage findings are presented to the peer audience for feedback and the *reflection* stage finds students looking at both what was learned and the process by which it was achieved. WebSTAR projects placed collaboration at both the faculty and student level at the core of the design.

Given the scarcity of post-secondary models for exemplary use of the Web, three sources well known in secondary education were studied to inform the development of the WebSTAR. These included Margaret Riel's Learning Circles, Bernie Dodge's WebQuests, and Judi Harris' Learning Structures.

Margaret Riel's work informed the collaborative core of the WebSTAR method. Riel's Learning Circles represent one of the first on-line learning environments for collaboration among k-12 classrooms through task-based micro-communities. The goal of learning circles was to assemble classrooms of students with diverse perspectives to be focused on a common issue that then through interaction, discourse, and common work, created a common systemic

understanding. Riel (2002) states that the shared goal is "the communal use of diversity to achieve a deeper understanding of issues, to find a solution to problems, or to complete a task in a way that is beyond the capabilities of any single person."

Dodge (1997) developed WebQuests – web mediated inquiry based learning projects – that have emerged as a popular means for creating a learning environment that integrates Web resources with traditional ones, as students collaboratively research, analyze, and manipulate information to inquire and construct meaning. WebQuests may either be a short or long-term inquiry projects. They have developed an enthusiastic following by k-12 teachers and recently university faculty as well have begun to use WebQuests with both undergraduate and graduate students. WebQuests consist of a set of steps including introduction, task, information resources, process, guidance, and conclusion with possible additions of assessment and standard links. Dodge's structured inquiry method guided the development of the suggested components of the WebSTAR nodes.

To provide proven models of telecommunication activities to be included by faculty in their WebSTAR design, Judi Harris' work was examined. Harris (1998) in an analysis of educational telecommunication activities identified three major categories of student interactions: interpersonal exchange, information collection and analysis and problem solving. Within each of these categories are a variety of activity structures or design tools that may be used by educators with any age of student.

Synopsis of WebSTAR Study

WebSTAR utilizes virtual classroom environments – WebCT or Blackboard for example – to create a space in which students interact with students from other institutions in the

investigation of a problem. Each institution has a discreet part of that problem to investigate.

The students at the campus are given an inquiry task that involves seeking the input from the

other campuses. Students may request a meeting within the discussion area of the virtual

classroom, structure a phone conference (using a low-tech, available technology) or request

information through e-mail exchanges. A final product is co-produced (i.e.. a virtual notebook or

an on-line publication) which summarizes the actions taken, information gathered and

conclusions reached.

  A graphic illustrating the construction of the WebSTAR is show in figure 1. Notice that

the faculty must come together to agree upon a central problem or focus. The ideal focus was

engaging, timely, and utilitarian in its relationship to the overall curriculum of the teacher

educator. In the WebSTARs that were undertaken with teacher education students these

problems have ranged from "Should the U.S. go to war in Iraq?" (that started shortly before war

was declared) and "Why is there low voter turnout in U.S. presidential elections?"(concurrent

with the 2004 election) to "Is the concept of 'disability' in young children determined by

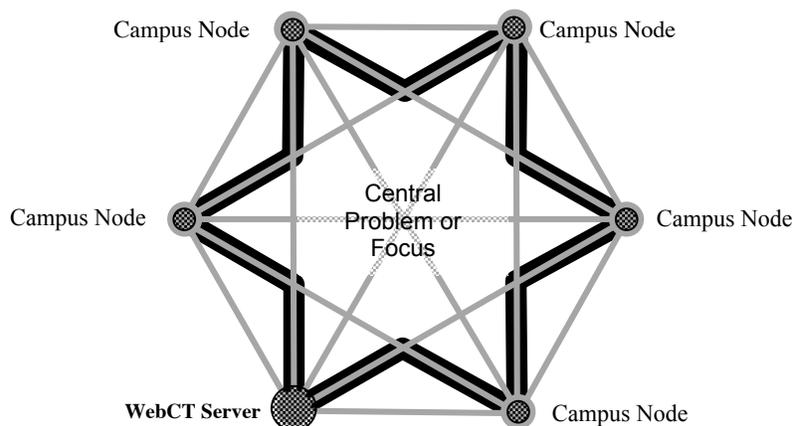cultural and socio-economic conditions?"

Figure 1: WebSTAR Model

Following the selection of the problem or focus area to be investigated, professors then turned to developing the individual campus node. Each node of the WebSTAR explored their individual area of inquiry both within their classroom as well as in collaboration with the other WebSTAR nodes (Figure 1). Each node contained the following components:

1. Area of Inquiry: This section linked the individual point of inquiry to the central problem, set forth the objectives and outcomes of the node, and informed students of the activities of the other nodes. Collaboration, as detailed in the Interactive Task section, is emphasized.
2. Inquiry Tasks: This portion contains a detailed list of steps to be undertaken to accomplish the objectives and outcomes stated in the Area of Inquiry. Certain of those tasks required interaction with the other nodes.
3. Interactive Tasks: This section places special emphasis on those tasks requiring input and interaction between groups.
4. Bookshelf: A list of resources pertinent to the area of inquiry.
5. Advice: This section included two advice sections: one containing help specific to the node while the second contained advice composed by all the faculty to ensure the success of the WebSTAR.
6. Culminating Activity: A clearly defined product reflecting the synthesis of the inquiry and interactive tasks.

After completion of the initial pilot project, three WebSTARs were developed and implemented during the 2004 academic year. A total of twelve faculty in three different subject areas utilized the *WebSTAR* design tool for two purposes: to create learning communities among multiple undergraduate classes totaling 182 students and to design an embedded course component that would allow students and faculty to address common areas of inquiry. Student participants were enrolled in undergraduate methods or other teacher education courses at ten four-year institutions of higher education in a Midwestern state. The sample consisted of eleven intact classes of pk-12 teacher education students who were majoring in social studies, language

arts, or early childhood special education, for an aggregated total of 182 students. Of the 182 participants 84% were female and 16% were male; 75% of the students self-classified themselves as traditional students while 25% selected non-traditional. Of the original 182 participants, 170 matched sets of pre- and post- treatment surveys were available for analysis.

Findings from the study supported the use of WebSTAR as collaborative, online model. The following findings suggest some impact of the WebSTAR model and process.

Students did learn content while participating in the WebSTAR.

Students constructed knowledge from meaningful ideas during the process.

Students were eager to create items for an audience greater than their immediate class, and were anxious for positive feedback on their efforts by other campuses.

The WebSTAR demonstrated that web pages can organize and direct student activities.

Computer technology can create the opportunity for collaborative learning across campuses at a distance.

Faculty valued the time to not only engage one another in a discussion of their own pedagogy, teaching strategies and beliefs but to also reexamine their own notions of good teaching and learning.

Faculty found collaboration though worthwhile to be a more difficult process than anticipated.

Faculty noted that the more timely the topic, the higher the student engagement.

Faculty reported an expanded repertoire of methodologies specifically available within a technology rich environment.

The section above briefly describes the WebSTAR model as implemented in preservice teacher education classrooms. These faculty and students have needs specific to the profession in which they will serve. However, the need for collaboration and expansion of the classroom beyond the physical four walls extends across all disciplines. Human service professionals may encounter situations either in the course of their work or in their personal lives where they would need to investigate that area of concern and develop persuasive communication and targeted actions in support of a cause or issue that seeks to change policies, positions, and programs. Students may best practice the requisite skills for such advocacy through participation in a collaborative exchange of ideas as facilitated within a WebSTAR.

Application of WebSTAR in Human Services

The following example demonstrates how a WebSTAR could be developed and used within Human Service undergraduate classes at different universities across a distance. It is based on the supposition that there are common social, political and economic problems in which human service professionals' advocate for their resolution or remediation on behalf of their clients. Examples might include access to childcare, social support services, access to affordable housing, or landlord tenant performance of contract issues (LTPCI).

These problems have unique circumstances and contextual features that prove useful as human service undergraduate students increase their knowledge about advocacy. For example, landlord tenant performance of contract issues –or LTPCI – are common among different populations. From a human service perspective not all tenants have the social and economic capital to settle these disputes on their own. This is also true of college and university students. One can go to virtually any classroom and find students who believe their landlords have not

carried out their contractual obligations to fix plumbing, electrical, and other physical defects in the building structure. Students are also quick to share which landlords honor their contractual obligations and those who do not. Given that this is a common condition in many communities it can serve as an area of inquiry for Human Service students at various campuses as they develop knowledge and skills in advocacy.

WebSTAR as both an instructional design process and a tool can bring people at a distance together to help Human Service instructors design problem based learning about advocacy. Having students investigate a common problem and analyze it to determine its common and unique features across distant communities makes learning about advocacy authentic and connected to the world beyond the classroom. The following describes the main components of a WebSTAR and uses the example of advocacy about LTPCI to illustrate the powerful features of WebSTAR as an instructional process and tool.

In planning the WebSTAR, professors from different parts of the U.S. or even the world would come together via video or phone conferencing technology available at most colleges and universities. Alternatively, they could meet by chat or on a discussion board. Professors would consider the needs of their respective classrooms and develop a central problem as a focus. In our example, it would be "how to advocate the resolution of landlord tenant performance of contractual issues". Professors would discuss how this problem could be engaging, timely, and utilitarian in its relationship to the overall goals of the human service courses they teach. Next faculty would brainstorm areas of inquiry for each individual classroom node on the WebSTAR model. Once decisions had been made about curriculum fit and types of inquiry, professors would establish a division of labor regarding the type of inquiry project that each individual class would carry out in relationship to the central problem and the parameters of virtual interactions

between classes. They would also gather resources either print or web-based to be placed in the Bookshelf area of the WebSTAR's homepage.

Finally, the faculty would establish a home for the WebSTAR in an on-line course environment such as WebCT, Blackboard or Desire 2 Learn. A homepage would be developed to serve as the hub of the WebSTAR. Links would be available to each of the inquiry tasks of each node, the Bookshelf of resources, and the Advice page. Classroom nodes may also use this homepage to post projects, mount PowerPoint presentations, pictures and video, as well as conduct synchronous or asynchronous discussions with one another. This virtual home for the project allows each class to communicate with one another in a variety of formats as planned by the professors. Likewise, professors or their designee can post up-date notes about various timelines or changes that need to be made by all participants.

We turn now to the design of the core of the WebSTAR. Below is an example showing how professors of four undergraduate classes across four different institutions might take the *central problem* – how to advocate for the resolution of landlord tenant performance of contract issues – and subdivide that problem into four individual *areas of inquiry*. Tasks for each node to follow in pursuing that area of inquiry are briefly summarized. Of particular importance is the separate *interactive task* that forms the core of the WebSTAR model and adds value to its use in the human service classroom.

Statement of Problem: How to advocate for the resolution of landlord tenant performance of contract issues [1]

Campus 1 Node

Area of inquiry and summary of tasks: Students in this node would design a survey to help students of all participating classes gather information about the types of problems tenants face - what contractual violations have occurred, security deposit refunds, steps previously taken to remedy the problem, etc. This survey would be posted on the WebSTAR homepage and other campuses would be directed to administer the survey to a specified audience. The Campus 1 Node would request that other campus nodes send them the survey results via U.S. mail and these would in turn be tabulated and analyzed. A PowerPoint presentation would be developed detailing the frequency and percent of problems being experienced at the four different locations.

Interactive task: Following the administering of the survey, intercampus collaboration and communication is promoted by mounting the Power Point presentation of the survey results and analysis of data on the WebSTAR home page. Other campuses would access the PowerPoint and hold class discussions about the information. Node A will compile a list of students from other node and pair students across classrooms to communicate by email (key pals). The key pal assignment will be for these student pairs to discuss the findings and analysis of the survey. Key pals would submit a summary of their discussion to their professor.

Campus 2 Node

Area of inquiry and summary of tasks: This class would construct an interview protocol for landlords. Prior to constructing the protocol, the class would use a variety of information sources to become knowledgeable about LTPCI. Such sources will include Campus 1 Node's analysis of the survey including what was discussed in class from the Key Pal activity, research into how to

create a sound interview protocol, and assembling a panel consisting of landlords and local housing authorities to discuss the problem from the landlord's perspectives. This panel would be video taped. The class would then post the interview protocol and directions for its use. The class would ask other class nodes to interview 5-10 landlords. After the interviews are completed each professor would discuss the protocol findings. They could also access the videotape of the landlord panel made by Campus 2 Node. This videotape would be available either by mail or by streaming video off of a link on the WebSTAR homepage.

Interactive Task: All nodes complete the landlord interviews following the protocol. Written results of the interviews are submitted to Campus 2 Node electronically by submitting word-processed documents to the WebSTAR home page drop box. Campus 2 Node students analyze and state the trends found in four parts of the U.S. Students in this class would then host a chat with two to four representatives from each of the other campuses about the landlord's perspective on LTPCI. These representative students will present a summary of their chat to their respective classrooms.

Campus 3 Node

Area of Inquiry and summary of tasks: During the planning process WebSTAR professors agreed to each develop a case study about landlord tenant non-performance contract issues. These four cases are posted on the WS home page. Classes at all four campuses use a variety of local resources including attorneys, representatives from housing authorities, and laws and ordinances unique to their area, to analyze the cases and create hypotheses as to their outcomes.

Interactive task: The results of the analysis would be sent to Campus Node 3. Students in this node will develop a database containing the different local laws and ordinances as they relate to the four cases. The database will be made available on the WebSTAR homepage. The information in the database will then be used by all class nodes to analyze how local ordinances and laws impacted the outcomes of the four cases.

Campus 4 Node

Area of inquiry: Class members have been assigned to do research on what constitutes successful plans of advocacy and action in general. They are directed to scrutinize these plans for common elements that make these plans successful. Likewise, they are to inspect information and data provided by other nodes for hints about what plan or plans of action might best work with contextual circumstances presented by the four classes.

Area of Inquiry and summary of tasks: The class researches and makes a list of common elements that successful advocacy plans exhibit. This listing is posted on the WS home page where other classes can access this information. The class asks that each node use these elements to develop a tentative advocacy plan and to select 2-4 representatives to present the plan to other nodes.

Interactive task: Class members with help of their professor schedule a teleconference and or videoconference with 2-4 representatives from other classes to share their tentative plans. At this conference representative, develop two version of an advocacy plans design to meet the contextual circumstances presented by the four sites. Plans are written and posted on the WS home page for other classes to view. The culmination in each node is a class discussion about

the development of advocacy plans and their likely hood of promoting a successful intervention and remediation of the problem.

Conclusion

Common on-line course software – i.e.. WebCT, Blackboard, or Desire2Learn – is most often used to deploy conventional teaching methods in a virtual environment. WebSTAR demonstrated that the virtual environment afforded by this software might be employed as a powerful tool for collaboration among undergraduate classrooms and faculty across a distance. WebSTAR is a valuable model for facilitating powerful learning and teaching through use of the World Wide Web and its telecommunication infrastructure for collaboration. Faculty at the university level benefit from time spent collaboratively developing problem based learning with their university peers in the same area of expertise. This use of time resulted in course development and, more importantly, co-reflection on current pedagogical practices that utilize technology in appropriate ways. Use of the WebSTAR benefits existing courses by providing undergraduate students with the opportunity to extend the walls of their classroom as they collaborate with other undergraduate students in the construction of knowledge about content, skills and professional dispositions. Infusion of WebSTAR into portions of undergraduate courses can facilitate both faculty and student engagement in thoughtful discourse about content and issues within their profession.

References

Bruffee, K.A. (1999). *Collaborative learning: Higher education, interdependence, and the authority of knowledge* (2nd ed.). Baltimore, MD: The Johns Hopkins University Press.

Chen, T. (2004). Recommendations for Creating and Maintaining Effective Networked Learning Communities: A review of the literature. *International Journal of Instructional Media*, *(30)*1, 35-44.

Cuban, L. (2001). *Oversold and underused: Computers in the classroom.* Cambridge, MA: Harvard University Press.

Dodge, B. (1995). *Some thoughts about webquests*. Retrieved November 23, 2002, from http://edweb.sdsu.edu/courses/edtec596/about_webquests.html

Harris, J. (1998). Curriculum-based telecollaboration: Using activity structures to design student projects. *Learning and Leading with Technology*, *26*(1), 6.

McGrath, D. (2004). Strengthening collaborative work. *Learning and Leading with Technology*, *(31)*5, 30 -3.

Ravitz, J.L., Becker, H.J., & Wong, Y. (July 2000). *Constructivist-compatible beliefs and practices among U.S. Teachers*. Retrieved October 20, 2003 from http://www.crito.uci.edu/tlc/findings/report4/startpage.html.

Reid, J., Forrestal, P., & Cook, J. (1989). *Small group learning in the classroom.* Portsmouth, NH: Heinemann.

Riel, M. (2002). *Learning circle guide.* Retrieved November 28, 2002 from IEARN Web site: www.iearn.org/circles/lcguide/

Notes:

1. The genisis of this topic emerged out of a conversation about advocacy with Dr Ann Frisch

and review of her article in the previous edition of HST.