Web-based Instructional Supplements

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Introduction

- Traditional Classroom
- Power Pedagogy
  - set of instructional methods designed to
    - increase faculty productivity
    - accommodate more students with available, existing facilities
  - in line with "do more with less" dilemma
  - distance education, virtual classrooms

Methods of Instruction

- Evolution of Instructional Media
  - Dialogue (Socratic method)
  - Print
  - Audio (e.g. radio broadcasting, audio cassettes, telephone)
  - Audio / Video (e.g. television, video cassettes)
  - Satellite and Cable
  - The Internet and the World-Wide Web

Power Pedagogy = Technology-Based Instruction

- Possible Learning Activities
  - Private newsgroups / mailing lists for each class
  - Collaboration via electronic mail
  - E-mail submission and critique of work
  - Video conferencing
  - Electronic posting of grades, class handouts, notices, schedules, exhibit areas, etc.

Discussion and Elaboration

- Coastal Carolina University
  - campus network supporting >2,300 users
  - access to Usenet newsgroups via public news server
  - e-mail lists via the Majordomo mailing list manager
    - Pegasus Mail for Windows on Academic LAN
  - distance learning (DL) enhanced classroom
    - M.B.A. program with Winthrop University

- Coastal Carolina University Traditdonl
  - Web access available < two years ago
    - on-line course syllabi and course policies
    - distribution of class notes, handouts, announcements
    - posting of grades
    - course-in-progress assessment
    - guest lectures (video clips and/or live stream)
    - on-line conferences and chat rooms
    - transportable GW2K Destination modules
Discussion and Elaboration

- When is Technology-Based Instruction (TBI) Appropriate?
  - Time & space (Chizmar & Williams, 1996)
    - same-time/different-place
      - mitigates geographical isolation
    - different-time/different-place
      - resolves scheduling conflicts
  - Also: distribution of scarce, or unique, instructional resources that are accessible through the Web

Discussion and Elaboration

- Reactions to TBI
  - Positive: Excitement
    - Potential
    - Keeping up-to-date
  - Negative: Resentment
    - Learning curve
    - Initial costs involved
  - too much time in their heads
  - set in their ways

Discussion and Elaboration

- Advantages of TBI (Bolhan, 1994)
  - facilitates direct manipulation of real data
  - allows professor to customize a curriculum based on his or her area of expertise
  - convenient way to organize, prepare, and present lectures
  - Web-based coursework better engages more motivated students to make contributions to the curriculum
  - facilitates development of dynamic core-course curriculum through immediate feedback from students and faculty

Discussion and Elaboration

- Disadvantages of TBI (Bolhan, 1994)
  - alienation of some students
  - campus infrastructure needs
  - instructor preparation time

Summary and Conclusions

- Important issues to consider
  - exponential growth rate of technology
  - exponential growth rate of online information
    - "a picture paints a thousand words"
    - a graphic image tends to be an order more than a thousand bytes
  - degree of academic and administrative support
  - availability of training programs, workshops, etc.

References

- Bibber, M. & Vitali, F. 1997. Toward support for hypermedia on the WWW. TT(Computers), 10(2), 62-70
At this session, we will present the finished product, along with a discussion of the methods we used to get funding for the project and the methods utilized to create and distribute the materials. The experience we will share in the development of this module will include the pitfalls as well as the successes, including a discussion of the development time line. Anyone interested in multimedia development is encouraged to attend this presentation.

Friday 9:30 a.m.
Innovations in Web Based Instructional Strategies
Charly Wetzsch - USC Columbia

Teachers and students can access the World Wide Web to link to an infinite amount of material. This session will demonstrate how to locate, create, and access interactive lessons, web-based simulations and games that can be adapted for use with any age group of learners. The presenter will discuss the development of technology applications and suggest methods to evaluate the effectiveness of course modifications. Participants will be provided with web resources for interactive applications.

Friday 10:30 a.m.
Using Multimedia to Understand Statistical Concepts
Janelle Reck - Clemson University

Studies have suggested that an activity-based approach to teaching enhances learning by improving the students' understanding of statistical concepts. A computer-based tutorial (CBT) is being developed to assist students in understanding statistical concepts. The CBT would encourage interactive learning by allowing them to approach the material at their pace. The CBT includes test material, hyperlinks, exercises with immediate feedback, a tutorial that explains the concepts and provides a step-by-step approach to problem-solving, and case studies. The CBT is intended to reinforce and expand on concepts discussed in lectures. Students' reactions to the CBT will also be presented.

Friday 1:30 p.m.
Web Based English Instructors
Elise Sperry - USC Columbia

Several different courses have been developed using the World Wide Web as a teaching tool to enhance student participation in the learning process. This involved the student in the construction of Web pages which supported course instruction and in some cases gave them outside the own writing efforts. Student Web pages were added to an existing base of course Web pages which were a tangible framework for the course structure. Students also used a WWW to keep journals and turn in assignments. The courses ranged from a Science Fiction Literature course where many students already had a substantial familiarity with the Web and HTML to a Feminist Literature Criticism course where few of the students had expertise in Web use, much less Web authoring. These efforts were very successful and additional applications of this multimedia learning environment are under development.

Friday 1:30 p.m.
Literature and the Arts of the Holocaust
Judith Meltz - Clemson University

I am developing a multimedia module using Authorware for a course I am inter-teaching entitled "Literature and the Arts of the Holocaust." While this course focuses on the literature and art created in response to the events of the Holocaust, much background information is needed for students to understand this period of history. To appreciate the literature, at least a superficial understanding of the political and economic influences of the twenties in Germany as well as the events which culminated in the rise of Nazism in the thirties is needed to help students understand the historical context. An overview of the methods the Nazis used against the Jews is presented as well. The first challenge is to provide sufficient content for the materials of the course, but not to overburden the students with excessive detail. A second challenge is to create a rich, visual and sound environment as possible in the course. While lectures supplemented with slides and handouts can provide the environment, I believe that multimedia modules as classroom supplement for this course will be a superior teaching technique for several reasons. First, multimedia provides not only visuals, but also animation and sound. Second, the multimedia module is available for students' review at any time.

Friday 11:30 a.m.
Student Development of an Interactive Web Tutorial Site
Cathi Chambers - Jill Miller

Friday 12:30 p.m.
Web-based Instructional Supplements
Barbara Juliano - Coastal Carolina University

In this paper, the author presents how he has used the Web to supplement traditional instruction. The primary focus is on the use of Web pages as an interactive teaching tool that supplements an extension of the regular classroom. This includes distribution of electronic supplements to students in a class, as well as collection of survey responses to regular class assessments by the students. The benefits of the resulting communication through the Internet are highlighted. Other supplementary use of the Web as discussed along with some suggestions from the author's own experience.

Friday 12:30 p.m.
Web-Based Database Instruction: Setting Up and Maintaining a Database on the Web
Thomas J. C. Saye and Gary. S. Scott - University of South Carolina - Aiken

This oral presentation will address setting up a database for viewing and interaction via the World Wide Web. Different CGI and web server plug-ins will be evaluated and effective database design will be discussed. Demonstrations of various database design and possible web interaction also will be included.
HEN A '97 PRE-CONFERENCE AND CONFERENCE AGENDA

PRE-CONFERENCE

WEDNESDAY, OCTOBER 8
at Harry-George Town Technical College
Third Floor of the 1000 building
Registration
Workshops: Come as You Are, Leave With Your Home Page (1 hour break for lunch)
8:45 - 9:15 a.m.
9:15 a.m. - 4:00 p.m.

CONFERENCE

WEDNESDAY, OCTOBER 8
Registration at Quail Creek Resort—Water Oaks Lobby
Wednesday Social—Water Oaks
3:00 - 7:00 p.m.
6:00 - 9:00 p.m.

THURSDAY, OCTOBER 9
Registration
Speaker / Moderator Breakfast (Casual) Continental Breakfast (in the Vendor Exhibit Area) Concurrent Sessions Lunch on your own Workshops (Harry Downe Technical College) Thursday Social—Water Oaks
7:30 a.m.
7:30 - 8:30 a.m.
8:30 a.m. - 1:15 p.m.
1:15 - 2:30 p.m.
2:30 - 3:30 p.m.
5:00 - 9:00 p.m.

FRIDAY, OCTOBER 10
Speaker / Moderator Breakfast (Casual)
Continental Breakfast (in the Vendor Exhibit Area)
Concurrent Sessions Lunch on your own Workshops (Harry Downe Technical College)
Pigskin and Music Social
7:30 - 8:30 a.m.
8:30 a.m. - 1:15 p.m.
1:15 - 2:30 p.m.
2:30 - 3:30 p.m.
6:00 - 10:00 p.m.

SATURDAY, OCTOBER 11
Continental Breakfast Closing Session with Guest Speaker Business Meeting
8:30 - 9:30 a.m.
10:00 - 10:30 a.m.

HIGHER EDUCATION NETWORK ASSOCIATION

The purpose of the Higher Education Network Association (HEN A) is to draw together individuals within North Carolina post-secondary education, who have a common interest in technological and instructional advances associated with computing, for the enhancement of knowledge, communications and expanders.

Table of Contents

Agenda .................................................................................................................. 2
By-Laws ................................................................................................................. 15
HEN A Conference History ................................................................................... 3
HEN A Exhibitors .................................................................................................. 5
Pre-Conference Workshop .................................................................................... 5
Workshops .............................................................................................................. 6
Session Speakers - Abstracts .................................................................................. 7
Session Schedule ................................................................................................... 14
Speaker Index ........................................................................................................ 4

2