ED 425 714   IR 019 202

AUTHOR   Bird, Bruce
TITLE   Application of FrontPage 98 to the Development of Web Sites
                for the Science Division and the Center for the Advancement
                of Learning and Teaching (CALT) at Anne Arundel Community
                College.
PUB DATE   1998-00-00
NOTE   7p.; In: Association of Small Computer Users in Education:
                Proceedings of the ASCUE Summer Conference (31st, North
                Myrtle Beach, SC, June 7-11, 1998); see IR 019 201.
PUB TYPE   Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   Authoring Aids (Programming); College Faculty; Community
                Colleges; *Computer Software; Computer Software Selection;
                Computer System Design; Computer Uses in Education;
                Educational Technology; Evaluation Criteria; *Faculty
                Development; *Hypermedia; *Material Development; Science
                Teachers; Two Year Colleges; *World Wide Web
IDENTIFIERS   Anne Arundel Community College MD; Links (Indexing);
                *Microsoft FrontPage; Support Services; *Web Sites

ABSTRACT
                This paper discusses the development of two World Wide Web
sites at Anne Arundel Community College (Maryland). The criteria for the
selection of hardware and software for Web site development that led to the
decision to use Microsoft FrontPage 98 are described along with its major
components and features. The discussion of the Science Division Web site
addresses efforts at acquainting science faculty with the capabilities of
FrontPage 98, training and support to assist faculty in preparing personal
Web pages, and providing workshops for faculty developing Web-based courses.
The Center for the Advancement of Learning and Teaching (CALT) Web site,
developed as a teaching and learning resource for the college community, is
discussed; highlights include CALT links to other Web resources and inclusion
on the site of examples of what can be done with various hardware and
software tools. Several suggestions for helping faculty make the journey from
anxiety to enjoyment/comfort in the use of technology are offered. Several
Web sites related to FrontPage 98 and faculty development are listed. (AEF)

Application of FrontPage 98 to the Development of Web Sites for the Science Division and the Center for the Advancement of Learning and Teaching (CALT) at Anne Arundel Community College

Bruce Bird
Physics Department
Anne Arundel Community College
101 College Parkway
Arnold, MD 21012
1-410-541-2262
blbird@mail.aacc.cc.md.us

Introduction

Over the last two years Anne Arundel Community College has undergone a rapid infusion of technology onto the campus. Last summer I was given the opportunity to develop computer support for faculty through our Center for the Advancement of Learning and Teaching (CALT). As part of that effort I developed a Web site for CALT (http://www.aacc.cc.md.us/calt)In the fall I also became the Science Division computer coordinator. Part of my responsibility as coordinator is to develop a Web site for the Science division (http://www.aacc.cc.md.us/science) and help science faculty produce their personal Web pages.

Previous to this, about two years ago, I set up my own Web site with a local ISP and so had enough experience with HTML to find it extremely time consuming for creating Web pages. In addition once I had placed a large number of links on my site I found it impossible to ensure that all links were unbroken. When Microsoft FrontPage 97 became available the three features that caught my attention were its elimination of the need to use HTML, its WYSIWYG word processor style interface, and its site management capabilities that includes automatic detection of broken links, both internal and external.

Choosing software and hardware

We have always been on a technology learning curve. The difference at the present time is the rapid simultaneous introduction of new technologies (computer, network, and software) with each of these technologies spawning several companies who all proclaim the superiority of their product. How can anyone find the path to technology nirvana? I have no absolute answers, only suggestions based on my experience stumbling along my own learning curve and trying to help others to move forward on theirs.

Some criteria I think important for selecting hardware and software are:

1. it needs to be easy to learn and use
2. cheaper is not always better but it helps
3. it should incorporate the "latest and greatest" technology advances
4. it has good support - both from the company that produces it, as well as from the Web community and the publishing industry

5. it has been recognized as an outstanding product by reviewers
6. it is compatible with existing hardware and software

Applying the above criteria to several available Web site development programs I decided to use Microsoft FrontPage 98.

Microsoft FrontPage 98

At the end of this article I have placed links to the Microsoft FrontPage 98 Homepage as well as several FrontPage 98 sites that provide useful information about this program. The Microsoft site will give you a detailed description of all the important features of this program.

The FrontPage 98 package comes with five major components:

1. FrontPage Explorer   – used to create, change, maintain, and administer Web sites
2. FrontPage Editor   – used to create, edit, and view Web pages using a WYSIWYG word processing interface
3. FrontPage Server Extensions – installed on your Web server to support certain FrontPage components
4. Microsoft Image Composer   – an image editing program
5. Microsoft Personal Web Server – a fully functional Web server program

In order to use the more advanced features of FrontPage 98, the FrontPage 98 server extensions must be loaded on your Web server.

Some of the features of FrontPage 98 that I have found particularly useful in creating the CALT and Science Web sites are:

1. The word processor style interface with WYSISWYG has several icons and controls that are identical to those used in other programs that make up the Microsoft Office Suite.

2. Creating tables and forms is essential a click and drag or dialog box interaction with no need for the user to do HTML formatting or CGI programming.

3. Web hyperlinks can be inserted automatically in your Web page by using a dialog box and viewing the desired site in your Web browser, thus avoiding errors in typing URLs.

4. Text files, images (GIG or JPEG), hit counters, and search engines can be inserted in a Web page with just a single menu selection and a few choices from a dialog box.

5. Copy and paste can be used to move components quickly from one Web page to another or from another Microsoft application into the Web page and all links remain active.

6. Automatic link verification in FrontPage Explorer provides a way to easily check the status of all internal and external URLs.

In general we have found FrontPage 98 to be a useful and effective program for creating and managing Web sites. Some things to watch out for in using this program are:

1. We have not yet been able to successfully install the Microsoft Personal Web Server (MPWS) on any computer connected to the college network. Luckily, for our purposes we don't need it. What works for us is to install everything except the MPWS on individual faculty computers. We have not had any problem installing MPWS on computers that have a modem connection to an ISP.

2. Because of differences between Microsoft and Netscape browsers it is <u>essential</u> that Web pages created in FrontPage 98 be viewed with both browsers. I have sometimes found differences in the positioning of page elements, color differences, and unwanted text layering. These differences have been easily corrected by editing the original structure of the Web page.

Faculty Development

The rapid introduction of technology into a college necessitates an associated faculty professional development effort. The problems and approaches that various colleges have taken in this effort have been extensively discussed and links to some of these materials are listed at the end of this article.

Science Division Web Site

Building the Science Division site provided the opportunity to acquaint science faculty with the capabilities of FrontPage 98 and also increase their awareness of the nature and extent of science related sites on the Web. Approximately 30 science faculty and staff were introduced to FrontPage 97 and 98 through a two-hour, one-on-two session with the program. The FrontPage 98 program was loaded on a computer in the science building and was available to all science faculty. They were then asked to prepare their own personal Web pages. Most opted, however, to not use FrontPage 98 but instead to prepare material in a word processing program and give it to me to insert onto their personal Web page. A few chose to use templates prepared by our Media Production Services or to use pages they created on personal sites located on local ISPs. Except for two staff member none chose to use FrontPage 98 to create their own Web page. Several expressed interest in doing so but said lack of time was the main reason they didn't use it. Many faculty believe that if the program were available on their office computer so that they could directly edit their pages on the Web then they would be much more likely to use it.

A more successful approach that encourages faculty use of technology has been associated with the

development of Web courses through the distance learning center of the college. The distance learning center (http://www.aacc.cc.md.us/diseduc/) has set up an On-Line Academy for faculty developing new Web courses. All faculty who participate in the On-Line Academy have FrontPage 98 installed on their office computer and receive a copy of the book, <u>Microsoft FrontPage 98 At a Glance</u> by Stephen L. Nelson, Microsoft Press, 1997. They then participate in two, three hour, computer workshops run by myself and Marshall Lucas, the college webmaster, using computer exercises for FrontPage 98 that I have developed. The workshop materials provide a list of procedures (detailed step-by step instructions) for carrying out common tasks. A copy of the workshop materials has been placed on the Web under restricted access for workshop participants. Marshall and I provide follow up support if needed. Two science faculty are presently developing Web courses and so far the combination of reduced teaching load, FrontPage 98 on their office computer, introductory workshops, text, available one-on-one support, and a well-defined goal appears to be successful.

CALT Web Site

The purpose of the CALT site is to serve as a teaching and learning resource for the college community. Although the primary audience is the faculty and staff at AACC, the public nature of the Web provides an opportunity to serve the local community as well as any visitor from the Web.

Recognizing that the intended audience occupies a broad spectrum of backgrounds and interests I have attempted to:

1. increase awareness of the types and extent of resources on the Web;

2. use technology to teach technology;

3. provide examples of the applications of software and hardware to teaching and learning.

Although search engines provide a way to locate information on the Web I believe it is still useful to provide focused, annotated list of links, particularly for persons new to the Web. These are provided on the CALT site by pages of links to tutorials, teaching, learning, educational technology, higher education, electronic publishing, trends, examples, how to ... , and CALT resources.

The increasing number of high quality tutorials available free on the Web provides a way to use technology to help people move up the technology learning curve. The tutorials section provides links to tutorials on the Internet, search engines, evaluating Web sites, browsers, Windows 95, Microsoft Word, and Microsoft PowerPoint.

While links are useful they are not enough. The rapid introduction of new software and hardware tools (particularly when these new tools are easier to use, have a shorter learning curve, and are more effective than previous technology for teaching applications) emphasizes the importance of making teachers aware of these new tools and what can be done with them. Tools such as FrontPage 98 are a good example of this. The time consuming use of HTML and CGI scripts to produce Web

pages is replaced by essentially a word processing procedure. One of the best ways to convey what new tools can do is by means of examples. At the CALT site I have started to include some examples of what can be done with software (FrontPage 98) and hardware (Sony digital camera). This effort will continue along with examples of what can be done with new tools (Flash, Dynamite, Java Beans, Active X, dynamic HTML, etc)

Conclusions

Developing the CALT and Science sites along with previous experience presenting talks, workshops, and one-on-one tutoring with faculty on multimedia topics, authoring programs (Toolbook, Authorware, Director), and Web tools suggest that there is no one way to help faculty make the journey from anxiety to enjoyment (or at least comfort) in the use of technology in their teaching. Some general observations are:

1. faculty need time and appropriate resources;

2. whenever possible software must be on the faculty office computer;

3. workshops may be OK to get started but there needs to be a continuous program of support;

4. decide on the product (interactive teaching module, Web page, Web course, etc) before worrying about the software needed to produce the product. There is a lot to be said for just-in-time learning. It avoids a lot of time sitting in workshops learning material you will rarely use;

5. small projects that produce useful products are the best, at least when your starting up the learning curve;

6. concrete examples of applications of technology to teaching are more motivating than general discussions of educational technology;

7. faculty must be assured that when they develop technology dependent teaching materials that the teaching environment will allow these materials to be used.

Of course every college is unique in terms of mission, personnel, structure, and resources so the suggestions made in this article will have to be modified for each campus community.

Resources

Microsoft FrontPage

FrontPage 98 Home Page (http://www.microsoft.com/frontpage/default.htm)

Product Overview of FrontPage 98
(http://www.microsoft.com/frontpage/productinfo/overview.htm)

Mike's FrontPage FAQ Archive (http://w-ww.simplenet.com/frontpage/) "contains a collection of answers to FAQ's related to FrontPage and Web site development. These answers have been extracted from the newsgroup and other sources and whenever possible the credits to the contributor are maintained."

Support Area for Microsoft FrontPage (http://www.pmpcs.com/support/frontpage.htm) "These pages are intended to enhance the support already available for Microsoft FrontPage."

FrontPage User Tips by Keith Parnell's (http://www.frontpage.to/support/) provides tips on using Front Page 97 and 98.

CALT - FrontPage 98 Examples (http://www.aacc.cc.md.us/pubweb/) demonstrate some of the features of FrontPage 98. The CALT site is built using FrontPage 98.
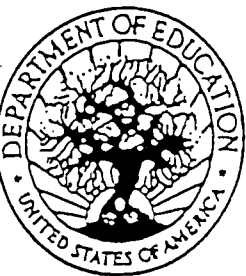
Faculty Development

" Incentive Programs to Support the Use of Instructional Technology by Faculty at a Major Research University and a Leading Liberal Arts College", by Connie Vinita Dowell and Todd D. Kelley.
http://www.cause.org/information-resources/ir-library/html/cnc9660.html

"Faculty Training for Technology", Fax-Back surveys conducted through Syllabus magazine and SyllabusWeb http://www.syllabus.com/fb_05_28_97res.htm

"Abstracts of Suggested Readings on Information Technology in Higher Education", by Linda A. Suskie   http://www.imir.iupui.edu/itreadings.htm

"Preparing Faculty for Instructional Technology: From Education to Development to Creative Independence", by Karen L. Smith
http://www.cause.org/information-resources/ir-library/html/ccm9739.html

"The Professional Practices of Faculty and the Diffusion Of Computer Technologies in University Teaching", by Michelle Proulx and Brian Campbell.
http://www.sociology.org/vol002.003/proulx.article.1997.html