

Newsletter: Using Computers in Chemical Education Spring 2002

ACS Division of Chemical Education :-Committee on Computers in Chemical Education

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Editor

[Brian Pankuch](#)

Scott Van Bramer, who takes care of organizing and monitoring our discussions on Newsletter articles, shares his expertise on using the Web. Our leadoff article by Scott combines an overall picture of what can be done using the Web for teaching as well as some very specific examples and suggestions.

Contributing Editor

[Donald Rosenthal](#)

[Developing Web Pages for Teaching](#)

Part I - Introduction

[Scott Van Bramer](#)

Department of Chemistry
Widener University
Chester, PA 19013

svanbram@science.widener.edu

Managing Editor

[Henry Derr](#)

Technical Editor

[Scott Van Bramer](#)

The Web has quickly become a powerful tool for undergraduate education and its use has rapidly expanded. Many faculty are struggling with how to use this tool for teaching. This question includes both what to do and how to do it. The web becomes a much more effective teaching tool when faculty can develop web pages for their courses. This set of articles will help you decide what to do and how you want to do it.

[Meta Search Engines for the WWW](#)

[Harry E.Pence](#)

SUNY Oneonta, Oneonta, NY

pencehe@oneonta.edu

Harry shares his experiments on searching the web with us. I'm finding material faster and much more efficiently thanks to Harry's suggestions.

The basic idea of a meta-search engine seems very attractive. Meta engines do not search their own database of web pages, but instead simultaneously submit the keyword(s) you enter to several different traditional search engines, compile the results from the various engines, and present the results to the user. If it is true that few search engines cover the entire searchable web (not to speak of the portions of the WWW that cannot be accessed by spiders) it seems like a very good strategy to combine the results from several different engines to obtain greater coverage and a correspondingly greater chance of finding the best reference to the topic being searched. In some cases, this approach is actually advantageous, but it is essential to understand that the basic assumption is probably not very accurate today and there are also some fundamental problems with meta-engines.

Using OS X

Brian Pankuch
Chemistry Department
Union County College
Cranford, NJ 07016

OS X is the newest operating system from Apple, and quite a system it is.

TOWARDS AN INTERACTIVE ELECTRONIC TEXTBOOK USING FLASH 5: A PERSONAL PERSPECTIVE

by
Roberto Ma. S. Gregorius

Pan American University
Edinburg, Texas

In the following article Greg shares some of his work with Flash and getting students

to interact with the material...The following article was born out of my efforts to prepare an electronic textbook suitable for General Chemistry. The effort to develop an electronic textbook was a response to the growing dissatisfaction of both the faculty and students over the textbooks we, in the department, had been using. We could not find a single textbook that would support all the different teaching styles. The students were relying more and more on classroom lectures and were using the textbooks more for the exercises available at the end of each chapter.

[DVD and WebDVD Technologies for Education](#)

[Gabriela C. Weaver](#)

Purdue University

Department of Chemistry

Gabriela brings us up to speed on this very interesting area of interactive storage...! the unique playback features of DVD also make the medium stand out. DVD offers up to interleaved camera angles that can be viewed, up to 32 different subpicture tracks for graphic overlays that can be used for subtitles, captions, simple animations, special effects or other applications, up to 8 audio tracks, each capable of 5.1 surround sound, making access to multiple languages trivial, seamless non-linear access (or branching) allowing for a programmable “personalized” experience, perfect still frames that can be displayed indefinitely, and interactivity and navigation via menus.'
