Inside This Issue

Technology Across the Curriculum ..........1
Browsing: A Strategy for Finding Focus in a Research Project ...............3
The Library of the Future ....................3

Pre/Views

WIC and Technology
by Vicki Tolar Burton, WIC Director

For the Writing Intensive Curriculum Program, this is the Year of Technology. Our goal is to bring information and training in technology for writing to OSU faculty, and in turn to student writers at OSU. We began the year with an October 4 presentation for faculty by OSU Digital Librarian Jeremy Prunkin (see WIC’s interview with on p. 3).

On November 15, Dr. Laura Gurak, Chair of Rhetoric at the University of Minnesota, spoke to faculty and students at a WIC-sponsored event. Her talk, “Writing and Technology: Who’s Steering?” was especially effective in raising student and faculty interest in academic uses of blogging. Gurak is a nationally-known expert in technology and writing.

With this issue of TWW, the WIC program welcomes a new program to the OSU faculty development effort. Technology Across the Curriculum (TAC), led by Jon Dorbolo, will help faculty bring appropriate technology into our teaching and learning. I invited Jon Dorbolo to introduce TAC to our readers in the lead article this month.

TAC will be collaborating with the WIC program on several projects this year, the first of which was sharing with WIC seminar participants how certain aspects of Blackboard can be used to achieve WIC learning outcomes. To further our technology theme, the winter term WIC seminar will offer training for faculty who want to teach WIC courses online. There is a serious need for more online WIC courses for distance degree students.

I also want to welcome a new WIC GTA, Wendy Oleson, who comes to us from Amherst College in Massachusetts, undergraduate WIC TA Kaitlin Rupert, who is a Computer Science major and Writing minor, and the new WIC/CWL Office Specialist Jeanna Towns.

Technology Across the Curriculum

By Jon Dorbolo, Associate Director
Technology Across the Curriculum Program

OSU has a new program that aims to increase understanding of new technology and its educational impacts: Technology Across the Curriculum (TAC). This program is grounded on the premise that a strong educational community at OSU must exhibit an array of proficiencies in the uses of information technology for the purposes of teaching and learning.

This essay is intended to illustrate and support two ideas:
1) that writing and technology are interdependent
2) that changes in writing technique may modify thought processes.

It follows from these claims that major changes in the technology of writing have the potential to transform the ways in which we can think. It further follows that educators should pay close attention to changing technology in order

continued on page 2

Teaching WIC Courses Online
An Interactive Workshop
2 to 4 pm
WIC Conference Room, 121 Waldo Hall
Co-Sponsored by
The WIC Program and Extended Campus

Topics: Strategies for Writing Intensive Teaching and Learning, Writing-to-Learn Online, Responding to Online Writing, Peer Review & Revising Online, and more.

To apply, contact
Marci.Robbins@oregonstate.edu

This workshop has been developed with the support of a WIC Department Development Grant

Questions: Contact Vicki Tolar Burton, WIC Director, or William Petty, Extended Campus
to assess and guide its impacts upon educational process.

Proficient users of information technology are able to use effective techniques to do the following:

- **Find information**
- **Organize information**
- **Interpret information**
- **Evaluate information**
- **Produce information**
- **Communicate information**
- **Collaborate with information**
- **Manage information technology tools**
- **Apply legal and ethical guides for using information technology**

Most of these competencies are part of a broad information literacy agenda. TAC is concerned with the ways in which information technologies are most effectively used to support these competencies. Of equal concern are the skill areas that form the foundations of effective information technology use. Reading and writing are crucial to computing and the internet.

**Find information:** Searching and researching on the internet, databases, library catalogues, and in texts is driven by the seeker’s uses of words. The power of one’s ability to find information is directly related to one’s ability to write strong search queries and revise them.

**Organize information:** The ability to put it into meaningful order renders the available information usable. Without purposeful organization, the massive volume of immediately available information is onerous. Being able to write a summary, précis, outline, etc. of a body of information is crucial to making strong use of what information is found.

**Interpret information:** Learners exhibit a key information competency when they are able to clearly express the goals and criteria for relevant information in a given context and to reference sources that satisfy those criteria. Writing a summary, synopsis, or bibliography is among the writing modes that support interpretative competence.

**Evaluate information:** Writing is partly a selection process, and making selections requires evaluative criteria. The ability to write a thesis, clear objectives, arguments, and references provides a basis for judging the rhetorical and logical strength of information and the credibility of the sources. Strong writers make effective judges of information quality.

**Produce information:** Information comes in many media, but writing is a constant in them all for planning, support, and implementation. Faculty, students, and staff must all have strong abilities to plan and create new information resources such as papers, articles, books, web pages, email, reports, proposals, and many others. In the 21st century it is infrequent that such information is produced without the aid of some information technology. The ability to use tools to create new, audience-accessible information is a critical skill.

**Communicate information:** Sharing information with the appropriate audiences in appropriate formats is the function of much of the information that is produced. Writing is an activity that typically has communication at its core. The criteria for effective writing apply equally to many uses of information technology for communication. Clarity, cogency, relevance, organization, style, and other common strong writing criteria provide a model for information technology design and use.

**Collaborate with information:** Shared information creates the potential for interaction between the author and the audience. In many instances, documents, presentations, proposals, manifestos, and other information resources are created by authors in collaboration. Writers have well established processes for collaboration such as editing, peer-review, group authoring, anthology, among others. Whether a group is debating a topic in a web board, planning a project by email, or co-authoring an article by attachment, the individuals involved need strong collaboration skills.

**Manage tools:** Even sophisticated information technology users encounter challenges in keeping their tools in good working order and current. Within the computing environment, folks need to be able to assess their needs, learn new programs and upgrades, use effective problem solving methods, identify appropriate sources of support, and make effective use of support. Writing plays an important role in these management competencies, especially in the analytic and communicative skills developed by writers.

**Apply legal and ethical guides:** Information technology users must be able to identify, understand, and apply the rights and responsibilities applicable to their information technology contexts. Skills in writing value statements, ethical criteria, case study analyses, and other modes lead to clarity in ethical and legal conditions.

Technology Across the Curriculum (TAC) has the goal of increasing information technology proficiencies university-wide. All students, faculty, and staff should manifest relevant practical abilities in the above listed competency areas. The Writing Intensive Curriculum (WIC) Program has a mission to support departments and faculty across the university in proposing and teaching WIC courses. The common ground between the two programs is defined by the relationships between writing and technology. While writing is a technologically enabled activity, the conduct of sound technology use rests upon the foundation of abilities that are explicitly exhibited in writing. Working with technology and writing together is a promising approach to improving our higher-order performance. We welcome comments and ideas from all colleagues interested in this prospect.

This is part of a longer article about the relationships of education, writing and information technology. Access to the full article at [http://oregonstate.edu/tac/articles](http://oregonstate.edu/tac/articles).
Jeremy Frumkin:  
Creating the Library of the Future  
An Interview by Wendy Oleson, WIC GTA

As the kick-off event for the Writing Intensive Curriculum Program’s Technology Initiative for 2004-2005, we sponsored a lunch seminar presentation by Jeremy Frumkin, Gray Chair of Digital Resources at OSU’s Valley Library. As a follow-up, WIC GTA Wendy Oleson interviewed Jeremy Frumkin about what his work brings to OSU and especially to WIC faculty and students.

WIC: Congratulations on your appointment as Oregon State University’s first Gray Chair for Innovative Library Services. How does that title give you flexibility to address the future of digital information at OSU?

Frumkin: Thanks. The position allows me to pursue out-of-the-box ideas as related to the digital library and digital information. Because this position is new, I have the opportunity to shape duties and pave a path for how the University and the Library build-out the digital libraries.

WIC: You came to us from the University of Arizona where your job title was “Metadata Systems Librarian.” Is metadata something you work with here at OSU?

Frumkin: Metadata is information about information resources. It’s usually descriptive information, like a catalogue, that helps people find information more easily. Metadata is the information that drives how online systems work. For example, when you search the library’s database by author or subject, the metadata is a digital record that makes the search possible.

WIC: On the Valley Library website I read that you’re working on a Digital Library effort to: “create the library of the future.” I know that I use the digital library already when I use a database like EBSCO. How will my research process be transformed in the future?

Frumkin: Currently you have to know something about where and how to search in order for that search to be successful. We want to lower the barriers that keep people from using a site or search engine, to make it so you can learn as you go, not as a separate process. In the future it will be easier to interpret the information you get; the metasearch could help manage citations, annotate digital research and share that information with others.

WIC: As I understand it, an Institutional Repository contains all the intellectual output of an institution: books, essays, articles, coursework, etc. Tell me about how the Valley Library continues on page 4

Browsing: A Strategy for Finding Focus in a Research Paper  
Anne-Marie Deitering

Students today are faced with an information landscape that goes far beyond the four walls of the library. Knowing that a simple keyword on a topic will result in 50,000 Google hits makes it natural to push students to focus their ideas and make that topic narrower right away. But to encourage this too soon can do a disservice to students struggling to figure out what they have to say about academic topics.

It is easy to think of research as a single step in the writing process, the step where the writer finds their “evidence.” Yet many undergraduates faced with research paper assignments find themselves in a bind: they cannot do targeted, productive research until they have focused their ideas, but at the same time, they do not have the subject knowledge needed to construct a focused thesis until after they have consulted outside sources.

Carol Collier Kuhlthau paints a complex picture of research as a recursive, constructive process. Successful student researchers in Kuhlthau’s study avoid the bind described above by exploring their general topic area before focusing on a specific thesis. By browsing through a variety of sources, developing an understanding of the issues others have raised, the student begins to identify what they want to add to the scholarly conversation about their topic.

The same information retrieval tools that make it possible for students to find 5,000 articles on a topic can also encourage this kind of exploration. Instead of immediately trying to reduce the number of hits generated by a broad keyword search in a tool like Academic Search Premier or the Summon catalog, a writer can browse through several pages of results, reading abstracts, tables of contents and subject descriptors to develop a richer understanding of how others have discussed the topic.

Building time into writing assignments for students to explore their topics and reflect on new information can have positive results. The student who develops a thesis that integrates the ideas and insights they find in outside sources is more likely to fully consider the complexities of a topic. Taking the struggle out of the research process frees valuable time that the student can use for thinking and writing.

For further development:

leads in the creation of OSU’s Institutional Repository.

Frumkin: The library leads by funding the start-up of the Institutional Repository, buying the necessary software and working with the departments and colleges of The University to build the richest IR possible. That said, The Library by no means works alone in the creation of the IR; it is a partnership of all The University’s colleges, departments and programs that are creating the information and materials that comprise the IR. The Library serves through its role as a central resource for preservation.

The challenges we face are in constructing the IR in a way that makes the value it adds to departments, colleges and programs obvious. As the IR grows, funding is a challenge because this is new work for the library, work for the University. We need the support of the campus to continue to be successful.

WIC: How do Wikis fit with your role as a digital librarian? Explain how to use a wiki as a research tool.

Frumkin: A wiki is an open collaboration tool that allows people to work in collaboration on a website. Wikis allow users to add and remove content without having to know how to use html or other technical tools. Even when a Wiki is edited, the earlier versions remain in the document’s history. The wiki is a great tool for collaborating on a project, but it isn’t a tool for searching for information. However, once you have the research, the wiki is a great place to let the work evolve.

WIC: OSU is one of five institutions (Emory University, Virginia Tech, Notre Dame and University of Arizona) participating in the National Science Foundation’s funded project called OCKHAM. OCKHAM is designed to improve traditional libraries’ access to the National Science Digital Library (NSDL). What is the purpose of this project?

Frumkin: The National Science Foundation funds many projects for the National Science Digital Library. The NSDL is made up of math and science content collected from a variety of universities and institutions and compiled into a central portal. The problem is that academic libraries and other libraries either don’t know of NSDL, or they can’t directly access specific resources in the NSDL. The OCKHAM project strives to make it easier for traditional libraries to pull in NSDL collections in a way that works with their current online systems to make it easier to decipher what collections and information the NSDL provides.

At OSU we have two main objectives: first we’re creating a tool that will allow librarians to search the NSDL collections, in math or engineering for example, the same way someone would search the library catalogue. Second, we’re creating a registry of content in the NSDL so a librarian could identify and include this information in the library website and link it to our databases.

WIC: Do you see any connections between your work and the WIC program? How might you impact the teaching of undergraduates?

Frumkin: We’re constantly working to simplify the research process to help students get the best information for their writing, and we’re working toward making the Library’s resources available on Blackboard. Wikis make the process of collaborative work easier; students can see what others are doing. Ultimately we want to keep abreast of the needs in different colleges, programs and departments. That said, communicating with WIC lets us know how we can best create technical support for the program.

WIC: Libraries have changed drastically since the card catalogue, thanks to the challenging work digital librarians do. Thank you, Jeremy, for taking time out of your schedule to give a luncheon presentation for WIC, and to talk with us now. You’ve also helped WIC with the process of updating our on-line writing guide for students by setting WIC up with a wiki on your website, Confluence. I hope we maintain an on-going discussion of the role of digital media with regard to WIC and OSU as a whole.

About Teaching With Writing

Editor: Vicki Tolar Burton
Assistant Editor: Wendy Oleson
Technology Advisor: Kaetlin Rupert

Teaching With Writing is the newsletter of the Oregon State University Writing Intensive Curriculum Program. As part of the Baccalaureate Core, all OSU students are required to take an upper-division writing-intensive course in their major.

The content of WIC courses ranges from radiation safety (for Nuclear Engineering majors) to golf courses design (a Horticulture option). While subject matter differs by department, all WIC courses share certain commonalities defined by the Faculty Senate:

- Informal, ungraded or minimally graded writing is used as a mode of learning the content material.
- Students are introduced to conventions and practices of writing in their discipline and use of borrowed information.
- Students complete at least 5,000 words of writing, of which at least 2,000 words are in polished, formal assignments.
- Students are guided through the whole writing process, receive feedback on drafts, and have opportunities to revise.

For complete information on WIC guidelines, contact Vicki Tolar Burton by email at vicki.tolarburton@oregonstate.edu, visit the WIC web site at <http://wic.oregonstate.edu>, or consult the OSU Curricular Procedures Handbook.