# **IAT INFOBITS**

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#### **About INFOBITS**

*Infobits* is an electronic service of the Institute for Academic Technology's Information Resources Group. Each month we monitor and select from a number of information technology and instruction technology sources that come to our attention and provide brief notes for electronic dissemination to educators.

Campus Desktop Computing Survey

Views of Technology in Schools/Workplace: Backlash or Reality Check?

Web-Based Instruction Book

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The Seven Deadly Sins of Multimedia Project Development

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#### CAMPUS DESKTOP COMPUTING SURVEY

For seven years Kenneth Green has conducted the largest continuing national survey of desktop (personal computers and workstations) computing and information technology in American higher education institutions. The survey enables colleges and universities to compare their academic computing capabilities with similar institutions. The data also show current patterns and future trends that can assist campus administrators in planning for technology innovations and growth. The latest survey, conducted in 1996, is based on data from 660 two- and four-year colleges and universities across the United States. A significant number of respondents identified "assisting faculty integrate technology into instruction" and "providing adequate user support" as the top two "single most important" information technology issues at their institution in the coming years.

The entire annual survey, Campus Computing 1996: The Seventh National Survey of Desktop Computing and Information Technology in Higher Education, is available as a printed report for \$35 (U.S.) from Kenneth C. Green, Campus Computing, P. O. Box 261242, Encino, CA 91426-1242 USA; tel: 818-990-2212; fax: 818-784-8008; email: <a href="mailto:cgreen@earthlink.net">cgreen@earthlink.net</a>. Quantity discounts and site licenses for local reproduction are available. Abbreviated versions of the survey reports for 1995 and 1996 are also available on the ERIC Clearinghouse Service Web site at <a href="http://ericir.syr.edu/Projects/Campus\_computing/">http://ericir.syr.edu/Projects/Campus\_computing/</a>

Out-of-print editions (1990-95) of the complete reports are available from the ERIC database on microfiche service; check your campus library for availability.

For more from Kenneth Green, see also "Building a Campus Infostructure" (*Trusteeship*, Special Issue on Information Technology, October 1996, <a href="http://www.agb.org/frames/building.htm">http://www.agb.org/frames/building.htm</a>) and "Technology as a Metaphor for Change" (League for Innovation in the Community College's *Leadership Abstracts*, vol. 9, no. 7, July 1996; <a href="http://www.league.org/labs0796.html">http://www.league.org/labs0796.html</a>).

For a survey on computers in the K-12 education levels, see the Educational Testing Service's "Computers and Classrooms: The Status of Technology in U.S. Schools." This report examines how students and teachers are using computers and assesses the quality, costs, and impact of educational technologies in American schools. For a printed copy of the report (\$9.50/copy), contact: ETS Policy Information Center, Mail Stop 04-R Educational Testing Service, Rosedale Road Princeton, NJ 08541-0001 USA; tel: 609-734-5694; email: pic@ets.org. The report is also available on the Web (in PDF format) at <a href="http://www.ets.org/research/pic/compclass.html">http://www.ets.org/research/pic/compclass.html</a>

ETS is a nonprofit educational measurement institution which annually administers more than 9 million exams in the U.S. and 180 other countries. Their Web site is located at <a href="http://www.ets.org/">http://www.ets.org/</a>

## VIEWS OF TECHNOLOGY IN SCHOOLS/WORKPLACE: BACKLASH OR REALITY CHECK?

As the number of desktop computers in schools and the workplace continues to increase, people continue also to question whether or not this is a good thing. In a statement prepared for a conference of school principals, Samuel Sava, the head of the National Association of Elementary School Principals questions the way the nation is attempting to fill schools with computers. "I have not the slightest doubt about the value of computers in our society. But I question whether we have learned to apply this technology to K-8 instruction." In articles appearing this month, others are voicing their reservations for the enthusiastic embrace of computers in education and in the workplace.

In "The Computer Delusion" (*The Atlantic Monthly*, vol. 280, no. 1, July 1997, pp. 45-62) Todd Oppenheimer quotes a poll taken in 1996 in which U.S. teachers ranked "computer skills and media technology as more 'essential' than the study of European history, biology, chemistry, and physics; than dealing with social problems such as drugs and family breakdown; than learning practical job skills; and than reading modern American writers such as Steinbeck and Hemingway or classic ones such as Plato and Shakespeare." While he deplores the goal of "computers in every classroom" when the costs require cutting back or eliminating other educational programs that have proven value, he believes that the solution is not to ban computers from the schoolroom altogether. However, when many schools don't "even have the money to repair crumbling buildings, install electrical outlets, and hire the dozens of new teachers recently required so as to reduce class size," school administrators, rather than "indulging in a consumer frenzy," must impose some limits on the spending for classroom computers. You can read the article, along with related Web site links, at <a href="http://www.theatlantic.com/issues/97jul/computer.htm">http://www.theatlantic.com/issues/97jul/computer.htm</a>

One of the arguments for computerizing schools that Oppenheimer mentions is "to make tomorrow's work force competitive in an increasingly high-tech world, learning computer skills must be a priority." Are computers having such a dramatic, positive impact in the workplace that it justifies the spending taking place in schools to prepare the future workforce? In "Taking Computers to Task" (*Scientific American*, vol. 277, no. 1, July 1997, p. 82) author W. Wayt Gibbs tackles the question of whether or not increased spending on information technology (computers, software, support) is resulting in improved workplace competitiveness and productivity. He says that economists are puzzled that, despite rising spending on IT, the productivity growth measured in the seven richest nations has fallen in the past 30 years, with the slowdown greatest in the service-sector industries, which are among the biggest IT spenders. In sales, management, and professional work "productivity gains have been limited and disappointing." Gibbs presents several explanations for this situation, one of which is that "computers, despite the enthusiastic claims made for them, are still mediocre tools for improving the efficiency and quality of most information work." The article is available on the Web, with accompanying links to related topics, at <a href="http://www.sciam.com/0797issue/0797trends.html">http://www.sciam.com/0797issue/0797trends.html</a>

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*The Atlantic Monthly* [ISSN 1072-7825] is published monthly by The Atlantic Monthly Company, 77 North Washington Street, Boston, MA 02114 USA. Annual subscriptions are available for \$14.95 (U.S. and territories). To subscribe, contact The Atlantic Monthly; tel: 800-234-2411; Web: http://www.theatlantic.com/xchg/subs.htm

For past Infobits articles in a similar vein, see:

"Simulations in the Curriculum" *IAT Infobits*, March 1997 <a href="http://www.unc.edu/cit/infobits/bitmar97.html#5">http://www.unc.edu/cit/infobits/bitmar97.html#5</a>

"No Significant Difference?" IAT Infobits, July 1996

http://www.unc.edu/cit/infobits/bitjul96.html#8

#### WEB-BASED INSTRUCTION BOOK

Web-Based Instruction, edited by Badrul H. Khan, includes a collection of case studies on designing and delivering courses over the World Wide Web along with essays on the critical issues associated with this learning environment. Kahn is Assistant Professor and Program Coordinator in the Educational Technology Program at the University of Texas at Brownsville. He discovered the need for such a text while searching for materials to use in a graduate-level course on Web-based instruction (WBI). He solicited submissions from people doing research in WBI and compiled the responses from nearly 100 authors in institutions around the world at all levels of education into a book that can be used as both an introduction to the field of WBI and a textbook for WBI courses. More details and a link to the book's table of contents can be found at <a href="http://www.gwu.edu/~etlalex/khan/wbitc.html">http://www.gwu.edu/~etlalex/khan/wbitc.html</a>

Web-Based Instruction. Englewood Cliffs, NJ: Educational Technology Publications, 1997.

Hardcover: ISBN: 0-87778-296-2 \$89.95 Softcover: ISBN: 0-87778-297-0 \$59.95

### INFORMATION TECHNOLOGY INNOVATORS AWARDS

Since 1989 the *Computerworld* Smithsonian Awards Program (under the auspices of the Division of Information Technology and Society at the National Museum of American History), helps fulfill the Smithsonian Institution's mission to promote the "increase and diffusion of knowledge" by seeking out and recognizing the exceptional achievements of men and women who have used information technology "to revolutionize the way humans communicate, conduct business, govern their lives and learn about the world." Each year, descriptions of the projects selected for consideration are added to the Innovation Network, a searchable Web archive of oral histories, transcripts, images, and case studies that now numbers more than 2,000 records. The 1997 winners were announced in June and have been added to the archive at <a href="http://innovate.si.edu/">http://innovate.si.edu/</a>

# THE SEVEN DEADLY SINS OF MULTIMEDIA PROJECT DEVELOPMENT

In "Dante's Divine Comedy: Multimedia in an Art Gallery" (*IEEE Multimedia*, vol. 4, no. 2, April-June 1997, pp. 88-92), John Minor Ross and Garnet Price describe a project at Indiana University's Kokomo campus to develop a multimedia system to accompany an art gallery exhibit of works inspired by Dante. In addition to reviewing their project's development process, the authors also include a list and explanation of "seven deadly sins of multimedia development" -- pitfalls that design teams should avoid to ensure success. Sins include "gratuitous use of technology" and "requirement creep." The entire article is available online at <a href="http://ada.computer.org:80/pubs/multimed/1997/u2088.htm">http://ada.computer.org:80/pubs/multimed/1997/u2088.htm</a>

*IEEE Multimedia* [ISSN 1070-986X] is published quarterly by the IEEE Computer Society, 345 East 47th St., New York, NY 10017-2393 USA. Annual subscriptions are available for \$23 (IEEE members), \$33 (other technical organizations) from IEEE Computer Society Publications Office, 10662 Los Vaqueros Circle, P. O. Box 3014, Los Alamitos, CA 90720-1264 USA; tel: 714-821-8380; Web: <a href="http://ada.computer.org:80/pubs/multimed/multimed.htm">http://ada.computer.org:80/pubs/multimed/multimed.htm</a>

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#### MEDICAL DATABASE ON THE WEB

In June 1997, the National Library of Medicine (NLM) announced that access to its MEDLINE database would be available free of charge on the World Wide Web. MEDLINE is the NLM's bibliographic database that covers the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, and the preclinical sciences. The database contains more than 8.8 million references to articles published in 3800 biomedical journals in the United States and 70 foreign countries. Two Web-based products, Internet Grateful Med and PubMed, provide user access to the database at <a href="http://www.nlm.nih.gov/databases/freemedl.html">http://www.nlm.nih.gov/databases/freemedl.html</a>

#### LIBRARIAN'S LINKS

New Information Resource Guide: "Extranets: Readings and Resources"

First there was the Internet and public-accessible World Wide Web. Next came intranets that provided secure areas for internal communication. And now the Third Wave . . . extranets. Extranets are extended intranets that connect not only people within an organization, but selected outside colleagues, customers, and partners. By allowing outside interactions with the high security and controlled access typical of intranets, extranets extend the benefits of an institution's intranet while promoting external transactions and collaborations. <a href="http://www.unc.edu/cit/guides/irg-50.html">http://www.unc.edu/cit/guides/irg-50.html</a>

The following IAT Information Resource Guides were updated this month:

"Exploiting Technology Grants: Information Resources" -- first update for this guide since 1994. Many new resources have been added, and new Web links have been provided for older resources. A new section, "Meta Lists of Online Grant Information," has been added to link users to lists of grant resources that others have compiled. http://www.unc.edu/cit/guides/irg-07.html

"Technology and Higher Education Statistics, Surveys, and Reports" <a href="http://www.unc.edu/cit/guides/irg-39.html">http://www.unc.edu/cit/guides/irg-39.html</a>

"Associations Involved in Multimedia Development and Related Activities" <a href="http://www.unc.edu/cit/guides/irg-10.html">http://www.unc.edu/cit/guides/irg-10.html</a>

"French Language Resources on the Internet: Selected Sites" <a href="http://www.unc.edu/cit/guides/irg-29.html">http://www.unc.edu/cit/guides/irg-29.html</a>

"Education Technology and Computer-Related Conferences" <a href="http://www.unc.edu/cit/guides/irg-37.html">http://www.unc.edu/cit/guides/irg-37.html</a>

**URL**: <a href="http://www.unc.edu/cit/infobits/bitjul97.html">http://www.unc.edu/cit/infobits/bitjul97.html</a>

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