

Technology Across the Curriculum

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Summary of Information Technology Literacy Emphasis in Programs

The following categories of technology use were found to be the most prevalent among the respondents. Of these, library/internet research skills were the most commonly used, followed by some form of presentation technology.

Categories of information technologies used in curricular programs

- Information Acquisition – Library/Internet research
- Presentation tools—primarily PowerPoint
- Media production / post-production technologies
- Program management – distribution of syllabi, course materials, etc.
- Data Analysis – Excel to SPSS
- Data manipulation
- Computer Programming
- Web Publishing – Dreamweaver to Blogs
- Instrumentation and measurement
- Social Documentation – audio/video
- Visualization/modeling – ArcGIS, NetLogo
- Graphic design/page layout
- Social software or intra-program communications such as online seminars, discussions and critique
- Non-electronic, discipline specific technologies—in particular technologies around arts production including woodworking, metalworking and sculpture

Trends by Area

Expressive Arts:

Focus was primarily on presentation/performance technologies including media production:

- Video/film
- Audio
- Photography/graphics
- Animation
- Music technologies—including synthesis, sampling, multi-track recording, MIDI technologies
- Web publishing

Several programs indicated non-electronic, discipline-specific technologies including printmaking, wood/metal/ceramic, painting and drawing, lighting, costume design, puppet making and sculpture.

Environmental Studies:

Common tools being used across many ES programs were

- Library/internet research
- PowerPoint for student presentations
- Data analysis using Excel– lab and field data

Specialized tools included:

- Mapping technologies – GIS/GPS
- Statistics—SPSS
- Scientific instrumentation
- Modeling tools – ArcGIS
- Graphics/page layout programs for scientific posters

Culture Text and Language:

The only common tool being used among these programs was library/internet research. In this group, more than others, privilege of print text was most apparent. When technology was used in the program it was often students who incorporated these tools into their work.

Specialized tools included:

- Documentation technologies - audio/video is often used for interpretation and analysis is presented in written or public presentation
- Presentation tools - graphics/page layout
- Communication tools such as program web pages and Web-Crossing discussion/chat

CORE:

Faculty used technology in many ways, reflecting their disciplinary backgrounds. They taught the basic skills they know and think are important. There is a strong commitment to teaching research skills. In at least two programs, faculty had sophisticated approaches to teaching a broad range of information technology literacy skills.

Evening and Weekend Studies:

EWS had the highest use of web-based “social software” tools for program communications/community building. Using library research was the next most common element. In many ways, the diverse use of technologies reflected the varied disciplines that make up EWS.

Inter-Area:

This group was diverse in its use of technology, from simply focusing on library research to broadly integrating a rich suite of technologies into multiple program components. Several programs incorporated sophisticated documentation and presentation technologies including web authoring using Dreamweaver, Blogs and Wikis, as well as multi-media presentations. Some programs in this area were also engaged in using computers to visualize principles in the arts and sciences.

Scientific Inquiry:

In this area, information technology is centered on the process of using scientific instrumentation for gathering data, using analytic software (primarily Excel) to analyze data, and using various presentation software to share results. As the programs become more advanced, there is a greater emphasis on using sophisticated graphics programs and instrumentation. The CAL appears a central resource and critical component for of many of the SI programs. Computer Science programs of course reflected a high degree of technology emphasis, particularly programming skills.

SPBC:

Commonalities found among this group were in use of library research strategies and presentation tools (primarily PowerPoint). Among business programs, Excel was used for financial analysis. Other than this, technology does not appear to be used for social statistics.