

GETF Information and Communication Technology (ICT) Literacy Recommendations

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Basic ICT skills and knowledge for Appalachian students

The 2006 Information Literacy Summit report defines ICT Literacy as “The ability to use digital technology, communication tools and networks appropriately to solve information problems in order to function in an information society” (Anne Marie Perrault, 2006 Information Literacy Summit. American Competitiveness in the Internet Age Report, October 16, 2006, Washington, DC, 2006. <http://www.infolitsummit.com/Documents/InfoLitSummit16Oct2007B.pdf>).

Appalachian students will demonstrate ICT skills and understanding at increasingly sophisticated levels as they progress through their academic careers at Appalachian. At the basic level, they will be able to

1. Understand basic computer terminology and concepts;
2. Locate and critically evaluate information;
3. Apply basic to advanced skills in word processing, spreadsheet, database, presentation, and web authorship applications to information and communication problems;
4. Use personal information management skills, such as email filtering, password selection and protection, personal computer backup, virus/malware scanning, and firewalls;
5. Understand the fundamental ethical and legal issues related to information and communication technology; and
6. Understand the fundamental social, political, and cultural issues related to digital identities in complex networks of information.

Proposal

1. Require incoming students to pass a proficiency test or successfully complete a 2-credit hour course to meet the ICT literacy requirement before the end of their sophomore year. Stand alone introductory level courses will build a common knowledge base and address basic terminology, fundamental concepts of IT, and basic skills. Existing courses that could be adapted to fulfill this are CS 1410 and CIS 1025. In addition, synchronous and asynchronous online courses using WebCt or its equivalent will be developed, and modules addressing specific skills and knowledge areas related to information searching or campus ICT resources (AppalNet, library electronic resources, etc.) will be taught in the context of general education seminars.
2. Require a sample of students to take a more advanced test of general ICT literacy during or before the first semester of their junior year. This would provide data for an assessment of the ICT outcomes for the first two years of the general education program.
3. Advanced discipline-based ICT literacy requirements will be determined by departments and/or colleges.
4. Discipline-specific ICT literacy learning outcomes will be addressed in seminars or mid-level courses within the majors.
5. Requirements for basic, mid-level and advanced proficiencies will be reviewed and updated regularly.

Assessment

The National Information and Communication Technology (ICT) Literacy Policy Council is reviewing current ICT literacy and information literacy standards and will determine what students should achieve at different assessment levels--advanced proficiency, acceptable proficiency, and minimal proficiency. The Council expects the standards and criteria for proficiency levels “to help educators determine which students are proficient and which may need additional ICT literacy instruction” (ProLiteracy Worldwide. "What's New?" 2006. 1 February 2007. <http://www.literacyvolunteers.org/news/index.asp?aid=200>).

We recommend that a basic proficiency test be administered to all incoming students and a more advanced test to a sample of students midway in their careers at Appalachian. At this time, the ETS Information and Communication Technology test seems to be the most commonly used standardized test. “ETS defines ICT literacy proficiency as the ability to use digital technology, communication tools, and/or networks appropriately to solve information problems in order to function in an information society. This includes the ability to use technology as a tool to research, organize, evaluate, and communicate information, and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information” (ETS® ICT Literacy Assessment Overview, <http://www.ets.org/portal/site/ets/menuitem.1488512ecfd5b8849a77b13bc3921509/?vgnextoid=fde9af5e44df4010VgnVCM10000022f95190RCRD&vgnnextchannel=cd7314ee98459010VgnVC M10000022f95190RCRD>).

Proficiency measures for discipline specific assessment of ICT literacy in the majors will be determined as appropriate by department assessment methodology/techniques which may include tests, senior products, and/or e-portfolios.

General Education Objectives for ICT Literacy

I. Thinking critically and creatively

- A. Recognize, differentiate, and effectively employ appropriate and increasingly sophisticated strategies to collect and interpret digital information;

II. Communicating effectively

Communicating effectively requires sophisticated reading skills in conjunction with a high level of quantitative, technological, and information literacy.

- D. Determine the scope of information needed in specific research contexts and successfully identify, locate, evaluate, use, and communicate information from various media;
- G. Select and use hardware, software applications, databases, and other technologies effectively for both inquiry and communication.

III. Making local to global connections

- E. Employ appropriate and increasingly sophisticated means for communicating with people of other cultures.