Information and Communication Technology Literacy College of Charleston ICT Literacy Assessment.

The ICT Literacy Assessment is a comprehensive test of Information and Communication Technology proficiency that uses scenario-based tasks to measure both cognitive and technical skills. The assessment is created by ETS and provides support for institutional ICT literacy initiatives, guides curricula innovations, informs articulation and progress standings, and assesses individual student proficiency.

ETS defines ICT literacy proficiency as the ability to use digital technology, communication tools and 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.

The ICT Literacy Assessment is a comprehensive test of ICT proficiency specifically designed for the higher education environment. The 75-minute assessment measures the ICT Literacy construct covering seven proficiencies (**Define, Access, Manage, Integrate, Evaluate, Create, and Communicate.)**

> **The Core Academic Assessment** is targeted to students transitioning to college and is appropriate for all high school seniors, community college students, and freshmen and sophomores at four-year schools. The assessment provides administrators and faculty with an understanding of the cognitive and technical proficiencies of a student doing entry-level coursework. Academic advisors and students can make college-readiness decisions and course choices based on Core Assessment scores.

Both the Core Assessments use scenario-based tasks to assess all of the ICT skills required of today's higher education students — not just knowledge of technology, but the ability to use critical-thinking skills to solve problems within a technological environment.

The College of Charleston participated in ETS's Information and Communication Technology (ICT) Literacy Assessment in a pre-release beta in Fall 2005 and a pilot assessment Spring 2006.

The average score for the 49 CofC students that took the assessment in Spring 2006 was 150. For comparison, the average for all participating 4 year institutions was 156.4.

The ICT Literacy Assessment is a comprehensive test of Information and Communication Technology proficiency that uses scenario-based tasks to measure both the cognitive and technical skills that were described in 2003 as part of the College of Charleston's Deans Whitepaper on Student Information Technology Literacy

The domain assessed by the Higher Education ICT Literacy Assessment conforms closely to the Association of College Research Librarians (ACRL) Information Literacy Competency Standards for Higher Education (PDF).

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What cognitive and technical skills are measured by the ICT Literacy Assessment?

The ICT Literacy Assessment uses real-time, scenario-based tasks — NOT multiple-choice questions — to assess seven ICT skills required of today's higher education students. The test measures not only knowledge of technology, but the ability to use critical-thinking skills to solve problems within a technological environment.

Test takers, aided by technology, are asked to perform information management tasks such as extracting information from a database, developing a spreadsheet or composing an e-mail based on findings.

The 75-minute test assesses the following ICT proficiencies:

Define: The ability to use ICT tools to identify and appropriately represent an information need.

Activities include:

- Creating an academic research topic to fit a particular information need
- Asking questions to clarify a customer's information need
- Completing a concept map

Access: The ability to collect and retrieve information in digital environments. This includes the ability to identify likely digital information sources and to get the information from those sources.

Activities include:

- Searching through databases for information
- Browsing through linked Web sites for information
- Locating information through online Help
- Downloading and installing a (simulated) video player

Manage: The ability to apply an existing organizational or classification scheme for digital information. This ability focuses on reorganizing existing digital information from a single source using existing organizational formats. It includes the ability to identify existing organization schemes, select appropriate schemes for the current usage, and apply the schemes. Activities include:

- Sorting e-mails into appropriate folders
- Re-ordering a table to maximize efficiency in two tasks with incompatible requirements
- Documenting relationships using an organization chart

Integrate: The ability to interpret and represent digital information. This includes the ability to use ICT tools to synthesize, summarize, compare and contrast information from multiple digital sources. Activities include:

- Synthesizing information from IMs into a word-processing document
- Comparing and contrasting information from Web pages in a spreadsheet

Evaluate: The ability to determine the degree to which digital information satisfies the needs of the task in ICT environments. This includes the ability to judge the quality, relevance, authority, point of view/bias, currency, coverage or accuracy of digital information.

Activities include:

- Selecting the best database for an information need
- Determining the sufficiency (or lack) of information in a Web site, given the information need
- Ranking Web pages in terms of meeting particular criteria
- Determining the relevance of postings on a Web discussion board

Create: The ability to generate information by adapting, applying, designing or inventing information in ICT environments.

Activities include:

- Creating a graph that supports a point of view
- Selecting text and graphics that support a point of view

Communicate: The ability to communicate information properly in its context of use for ICT environments. This includes the ability to gear electronic information for a particular audience and to communicate knowledge in the appropriate venue.

Activities include:

- Formatting a word processing document
- Recasting an e-mail
- Adapting presentation slides
- Preparing a text message for a cell phone