

# ICT Communications Essentials Learning Objectives

| ICT Domain 2: Communications Essentials   |  |
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| Learning Objectives   |  |
| <b>Subdomain 2.1</b>  |  |
| <b>Explain how the Internet and its components function to enable communications.</b> |  |
| 2.1.1   | Define "Internet," and explain how it uses protocols and data packets to enable computers to communicate.  |
| 2.1.2   | Identify requirements for connecting to the Internet.  |
| 2.1.3   | Compare various Internet connection types (e.g., dial-up, cable, DSL, broadband, wireless, fiber-optic).   |
| 2.1.4   | Describe Internet addressing, including domain names, IP addresses, DNS.   |
| 2.1.5   | Compare various top-level domains (.com, .org, .edu, .gov, .net, .mil).  |
| 2.1.6   | Distinguish the Internet from the World Wide Web.  |
| 2.1.7   | Explain how Web browsers and Web servers interact to provide information to users.   |
| 2.1.8   | Define "Uniform Resource Locator (URL)" and identify associated protocols, including http://, ftp://, mailto://.   |
| 2.1.9   | Use various techniques and tools to navigate and access information on the Web, including hyperlinks, Web page and browser components, file downloads.     |
| <b>Subdomain 2.2</b>  |  |
| <b>Conduct basic research using resources located on the Internet.</b>                |  |
| 2.2.1   | Use various techniques with common search engines to locate information on the Web, including basic vs. advanced searching, keywords, Boolean operators.   |
| 2.2.2   | Evaluate search results and online information for relevance, credibility and quality using basic guidelines (e.g. authority, affiliation, purpose, bias). |
| 2.2.3   | Identify and apply copyright and fair use guidelines, and explain plagiarism as an ethical and legal violation.  |
| 2.2.4   | Incorporate results from Internet searches into a research project (e.g., report, summary).  |
| 2.2.5   | Download images as needed to support a research project, complying with copyright notices.   |
| 2.2.6   | Properly cite Internet sources used to obtain information for a research project.  |

## **ICT Domain 2: Communications Essentials**

### **Learning Objectives**

#### **Subdomain 2.3**

##### **Demonstrate knowledge of safety and privacy practices for online communications.**

2.3.1

Define "privacy" and relate it to the term "digital footprint."

2.3.2

Describe risks of communicating on social networking sites (e.g., Facebook, MySpace, Twitter), and identify ways to communicate safely.

2.3.3

Describe online communication practices that contribute to cyberbullying.

2.3.4

Practice safe online communication techniques with Internet searches, e-mail, chat rooms, and other social network Web sites.

2.3.5

Follow an Acceptable Use Policy (AUP) when accessing the Internet.

#### **Subdomain 2.4**

##### **Demonstrate effective strategies and techniques for locating, preparing and/or creating Web content.**

2.4.1

Describe effective text and image content for Web pages based on how visitors use the Web.

2.4.2

List guidelines and conventions for effective text on a Web page.

2.4.3

Explain the inverted pyramid model of newspaper journalism and how it applies to Web content.

2.4.4

Use word-processing software to create effective written content for a Web page.

2.4.5

Create and/or edit message-driven image content for a Web page using graphics software.

2.4.6

Access graphics through various resources (e.g., scanner, digital camera, CD-ROM, clipart, copyright-free online graphics).

2.4.7

Plan the content and design of a basic Web page using strategies for effective Web communication, including brainstorming, determining audience, choosing content and media types, using white space.

#### **Subdomain 2.5**

##### **Demonstrate effective and appropriate use of e-mail for online communication.**

2.5.1

Define "e-mail," and describe its functions and advantages as a form of communication.

2.5.2

Explain the format of an e-mail address (i.e., user name, @ symbol, domain).