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This project was supported by the Cybersecurity and IT Pathways grant from the Florida Department of Education through Cyber Florida, project number 291-1231C-2C001, funding authority 84.425C-D CRRSA ACT ESSER II 84.425D & GEER II 84.425C, FAIN#: S425C210052. More information at cyberflorida.org/pathways/

**Lesson Plan**

Researching the Web

MODULE 3

This **lesson plan** was written for the Florida Public School System DIGITAL INFORMATION TECHNOLOGY (8207310) course. Funded by the Cyber/IT Pathways Program, Cyber Florida, and the Florida Department of Education.

**Digital Information Technology (8207310)**

This Lesson Plan is designed to aid high-quality instruction through the identification of components that support learning and teaching. Each section of this Lesson Plan is modeled after 2022-2023 CTE Standards and Benchmarks for Digital Information Technology (8207310) as published by the Florida Department of Education Student Performance Standards.

Researching the Web

# Module Overview

This module provides an overview of how to find information on the web, types of online training, and risks, pitfalls, and strategies of using the web. Students will explore information resources and training resources available on the Internet.

## DIT Textbook Chapter Overview

The *Researching the Web* chapter in the accompanying DIT textbook supports the conceptual understanding of the content covered in this module*.*

## CTE Standard and Benchmark

**Standard 01.0:** Demonstrate knowledge, skill, and application of information technology to accomplish job objectives and enhance workplace performance. The student will be able to:

* **01.04** Utilize the Internet to find reliable resources and reference materials (e.g., online help, tutorials, manuals).
* **01.05** Apply research strategies to use and evaluate electronic research technologies for valid and reliable information.
* **01.08** Describe ethical issues and problems associated with computers and information technology (e.g., fair use, privacy, public domain, copyright, piracy, plagiarism).

**Standard 11.0:** Demonstrate competence using computer networks, internet, and online databases to facilitate collaborative or individual learning and communication. The student will be able to:

* **11.05** Demonstrate proficiency using search engines and search tools (e.g., Boolean search strategies).

# Continuity

Students will have read all content included in the *Careers in Information Technology* and *Ethical Issues in Information Technology* chaptersto prepare for the lessons included in this module.

Table 1 Continuity

| **Standard** | **Recommended Previous Lesson/Knowledge** | **This Lesson** | **Recommended Upcoming Lessons** |
| --- | --- | --- | --- |
| 01.04, 01.05, 01.08, 11.05 | Students should read the *Researching* and *Using the Web* and *Ethical Issues in Information Technology* chapters. | Students will use a web browser to research information on the Internet. | Students will use this knowledge in future DIT modules which require researching information on the Internet. |

# Student Learning Outcomes

**Standard 01.04, 01.05, 01.08**Students will be able to use the Internet to find reliable resources and reference materials.

**Standard 11.05**Students will demonstrate proficiency using search engines and search tools.

# Materials Needed

**Standard 01.04, 01.05, 01.08, 11.05**Students will need access to the Internet and an Internet browser to complete the activities using Wikipedia and Khan Academy.

# Use of Space

Activities associated with Standards 01.04, 01.05, and 11.05 will require a classroom space that includes computing devices. If the space does not have computing devices, the teacher can consider the use of student personal devices (ex. smart phones, tablets, laptops). If the student does not have a computing device, the teacher can consider using a device for class demonstration purposes. For instance, the teacher could use their own school-supplied or personal computing device to demonstrate to all students. Consideration should also be given to where furniture and students are placed within the classroom to accommodate diverse needs.

# Prepare for the Lesson

Table 2 shows how the teacher and students should prepare for this lesson.

Table 2 Preparations

| **Teacher** | **Student** | **Assessment/Assignment** |
| --- | --- | --- |
| The teacher should read the *Researching* and *Using the Web* and *Ethical Issues in Information Technology* chapters.  The teacher should be familiar with online research resources such as Google, Wikipedia, and Khan Academy.  The teacher should consider if a computing device should be used for instruction if computer devices are not available for all students.  The teacher should read the chapter case and consider how to receive feedback from the students. | The student should read the *Researching* and *Using the Web* chapter and study all terms.  The student should read the following sections of *Ethical Issues in Information Technology: Ownership Rules,* and *Ethics and Online Content.*  Additionally, the student should read the case at the end of the *Researching and Using the Web* chapter. | Standard 01.04, 01.05, 01.08, and 11.05: Students should complete the activities designed for online research resources such as Google, Wikipedia, and Khan Academy.  Worksheets will assess the student’s ability to perform the activities in class.  The teacher will review both chapter cases in class. The teacher will conduct a verbal discussion to solicit student responses and participation. Students will be assessed on the chapter case based on their written responses to the chapter case questions and in-class discussion.  An answer key and/or rubric is provided for all student activities. |

# Activities

Table 3 shows the student workload effort for each activity in this module.

Table 3 Student Activities and Workload

| **Activity** | **Description** | **Estimated Student Completion Time** | **DIT Standard Alignment** |
| --- | --- | --- | --- |
| Wikipedia Controversies | Student explores the controversies of Wikipedia to understand how the reliability of online resources varies. Each student will write a summary of one selected controversy. | 45 minutes in-class | 01.04, 01.05, 01.08, 11.05 |
| Online Training Resources | Student explores Khan Academy for access to free online courses. Each student will write a summary of a selected course. | 45 minutes in-class | 01.04, 01.05, 11.05 |
| Chapter Case: Christopher's Google Search | Student reviews the case from the *Researching and Using the Web* chapter and answers critical thinking questions. | 45 minutes in-class | 01.05, 11.05 |
| Chapter Case: Allison’s Report: To plagiarize or not to plagiarize | Student reviews the case from the *Ethical Issues in Information Technology* chapter and answers critical thinking questions. | 45 minutes in-class | 01.05, 11.05 |

# Assessments

The teacher will evaluate the student’s performance in researching resources on the web by measuring the accuracy of the student’s documentation.

Additionally, the teacher will evaluate the student’s critical thinking ability as they work in the case scenario. The teacher will use the assessment for formative purposes and will provide feedback on the accuracy of the student’s response and on means to promote student success.

The teacher will score assignments on a scale of 1-4 measuring the level of understanding the student is able to communicate about the subject.

# Accommodations

Please adhere to the [Florida Department of Education (2018) Accommodations Assisting Students with Disability Guidelines](https://www.fldoe.org/core/fileparse.php/7690/urlt/0070069-accomm-educator.pdf).

To reduce anxiety while completing activities, provide students with support while completing their assignments and sufficient time to complete their assignments in class.

Students can be encouraged to work with a peer to identify appropriate responses for the chapter cases.