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**Lesson Plan**

Introduction to Information Technology

MODULE 1

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.

Introduction to Information Technology

# Module Overview

This module introduces a brief history of types of computers, operating systems, and networks.

## DIT Textbook Chapter Overview

The *History of Information Technology* 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:

* **01.01** Develop keyboarding skills to enter and manipulate text and data.
* **01.02** Describe and use current computer technology and software to perform personal and business-related tasks in the workplace (e.g., e-mail, digital calendars, meetings, appointments).
* **01.09** Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

# Continuity

Students will have read all content included in the *History of Information Technology* chapterto prepare for the lessons included in this module.

Table 1 Continuity

| **Standard** | **Recommended Previous Lesson/Knowledge** | **This Lesson** | **Recommended Upcoming Lessons** |
| --- | --- | --- | --- |
| 01.01 | Students should read the *History of Information Technology* chapter.  Students should also be familiar with a computer keyboard. | Students will use a computer keyboard to develop skills required for entering and manipulating text and data. This includes identifying keys on a keyboard demonstrating the ability to type using appropriate finger placement. | Students will use this knowledge in future DIT modules which require keyboarding skills. |
| 01.02 | Students should read the *History of Information Technology* chapter.  Students should be familiar with how to use computer technology locate tools which can be used to perform personal and business-related tasks in the workplace. | Students will open and explore technology tools used to perform personal and business-related tasks in the workplace. | Students will use this knowledge in future DIT modules which require the exploration of technology tools such as word processors and spreadsheets. |
| 01.09 | Students should read the *History of Information Technology* chapter. Students should be familiar with how to power on a computing device and observe its operating system. | Students will identify personal or business scenarios where an operating system is used. | Students will use this knowledge in future DIT modules where an operating system is used to perform a personal or business function. |

# Student Learning Outcomes

**Standard 01.01**  
Students will be able to demonstrate accurate keyboarding skills via a speed and accuracy assessment measure. This objective can be achieved using a website such as typing.com (<https://www.typing.com/>) or any pre-written document which can be used to measure the students speed and accuracy to type text with a computer keyboard. To accomplish this objective, students must be able to type lower-case letters, capital letters, numbers, and appropriate punctuations using correct finger placement on a computer keyboard.

**Standard 01.02**Students will identify an operating system and its supporting software on a computing device. This is accomplished by the student completing a written worksheet which documents the student’s observations.

**Standard 01.09**Students will identify appropriate technologies based on a case scenario documented in the textbook chapter.

# Materials Needed

**Standard 01.01 and 01.02**Students will need access to the Internet, an Internet browser, and a keyboard to complete the activities.

**Standard 01.09**

Chapter case scenario is provided at the end of the *History of Information Technology* chapter.

# Use of Space

Activities associated with Standards 01.01 and 01.02 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.

The activity for Standard 01.09 can take place in any classroom space with a surface to write on.

# 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 *History of Information Technology* chapter.  The teacher should be familiar with the proper methods required to type using a computer keyboard.  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 teacher should read the *History of Information Technology* chapter and study all terms.  Additionally, the student should read the case at the end of the *History of Information Technology* chapter. | Standard 01.01: Keyboard typing assignments will be assigned which are designed to improve student performance with accuracy and speed. Students will be timed as they complete a typing assessment designed to record performance based on Words Per Minute and accuracy of words typed.  Standard: 01.02: In-class activities familiarize students with computing devices, their operating system, their software, and the purpose of the installed software. A worksheet will be used to assess the student’s ability to perform this task in class.  Standard 01.09: The teacher will review the chapter case in-class. The teacher will conduct a verbal discussion on the case 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** |
| --- | --- | --- | --- |
| Keyboard finger placement and typing practice | Student uses typing.com to measure how many words and how accurate the student can type per minute. | 45 minute in-class x 5 classes | 01.01 |
| Fundamentals of Applications | Student defines supporting applications on a computing device. | 45 minutes in-class | 01.02 |
| Chapter Case: Anthony's Learners Permit | Student reviews the case from the *History of Information Technology* chapter and answers critical thinking questions. | 45 minutes in-class | 01.09 |

# Assessments

The teacher will evaluate the student’s performance in identifying an operating system and keyboarding skills by measuring the accuracy of the student’s documentation. The keyboarding assessment is summative.

Additionally, the teacher will evaluate the student’s critical thinking ability as they work in the chapter case. 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.