

## UNIT 1

# History of Operating Systems

### Unit Overview



### Learning Goals

**Integrated Education & Training Skills:** Students will explain the historical development and purpose of various operating systems (e.g., DOS, Windows, Mac, Unix/Linux) by analyzing how informational texts make connections among individuals, ideas, or events through comparisons, analogies, or categories, while locating, analyzing, and organizing information.

**Essential Question:** How does understanding the evolution of operating systems help us analyze and organize information in ways that connect historical and technological developments?

**By the end of this unit,** you will be able to explain the history of different computer systems like Windows and Mac, and break down information to see how ideas and events are connected.

# Vocabulary *Builder*

**Directions:** Read the words and definitions below. Then complete the activity on the next page.

Word	Definition	Example in a Sentence
Operating System (OS)	The main software that controls how a computer works and lets you use programs.	Microsoft Windows is an example of an operating system that helps you open and use programs.
Software	A program or set of instructions that tells a computer what to do.	Microsoft Word is a type of software used for writing documents.
Hardware	The physical parts of a computer, like the keyboard, screen, and mouse.	The monitor and keyboard are examples of computer hardware.
Unix/Linux	A type of operating system often used by programmers and loaded on servers.	Many websites run on servers that use Linux.
Mac	A computer made by Apple that uses the Mac Operating System (MacOS)	She uses a Mac to design graphics.
DOS	An older operating system that uses typed commands instead of clicking.	DOS was used before Windows became popular.

# Vocabulary *Builder*

**Directions:** Read each sentence and choose the correct word from the word bank to fill in the blank.

1. Many servers and programmers use \_\_\_\_\_ because it is flexible and open-source.
2. The \_\_\_\_\_ is the main program that helps your computer run and lets you use other programs.
3. A keyboard and monitor are examples of computer \_\_\_\_\_.
4. Microsoft Word is a type of \_\_\_\_\_ used for writing and editing documents.
5. Apple computers use a system called \_\_\_\_\_ that is known for its design and security.
6. Before Windows became popular, many computers used \_\_\_\_\_, which required typed commands.

Word Bank
Operating System
Software
Hardware
Unix/Linux
Mac
DOS



# Systems & Changes

**Directions:** Read the passage below to learn about the history of operating systems.

A long time ago, computers didn't have colorful screens or easy buttons to click. People had to type every command using a keyboard. One of the first systems used for this was called DOS(Disk Operating System). DOS was simple, but it was also hard to use because you had to remember special codes to make the computer do anything. For example, if you wanted to open a file, you had to type a command like C:\>DIR.

As computers became more popular, companies wanted to make them easier for everyday people to use. That's when Windows and Mac came along. These systems let users click on pictures and icons instead of typing commands. This made computers more friendly and useful for schools, homes, and businesses. Windows, created by Microsoft, became the most widely and popular used system in the world. Mac, made by Apple, was known for its clean, sleek design and strong tools for artists and designers.

At the same time, another system called Unix was being used by scientists and engineers. Later, a version called Linux was created so more people could use it for free. Linux is still used today, especially for websites and servers. It's popular because it's flexible and you can change it to fit your needs.

Each operating system was made for a reason. DOS helped people control computers with typed commands. Windows and Mac made computers easier to use with pictures and menus. Unix and Linux gave people more control and freedom to build their own systems.

When we look at these systems, we can see how they connect to each other. DOS came first and helped build the idea of how a computer should work. Windows and Mac improved that idea by making it easier., and Unix and Linux took a different path, giving users more power and choice. These systems didn't just change computers, they changed how people work, learn, and communicate.

# Making Connections

Now that you have read about the history of operating systems, let's take a deeper look and see how an author connects ideas. Let's look at this sentence from the passage:

DOS came first and helped build the idea of how a computer should work. Windows and Mac improved that idea by making it easier.

What connections can we see in that sentence?

- The author is comparing **DOS** with **Windows and Mac**.
- DOS was the first system. Windows and Mac came later and made it easier.

**These are connections between two ideas.**

When you read information, like operating systems, you're not just learning facts. You're learning how these ideas fit together. **Making connections helps you understand why things happened, how they changed, and what they mean.**

## To make connections:

### Step 1: Look for Time Order

Ask yourself:

- Did one thing happen before another?
- Did something change or improve over time?

*Example: DOS came first. Then Windows and Mac made computers easier to use. That's a connection based on time and improvement.*

### Step 2: Look for Similarities and Differences

Ask yourself:

- Are two things alike or different?
- Is the author comparing them?

*Example: Windows and Mac both use icons and menus, but Mac is known for design and Windows is used more in offices. That's a comparison.*

# Making Connections

## Step 3: Look for Categories or Groups

Ask yourself:

- Are things grouped together for a reason?
- Do they share a purpose or audience?

*Example: Unix and Linux are grouped together because they give users more control and are used by programmers. That's a category.*

## Step 4: How Do These Ideas Fit Together?

- Does one idea build on another?
- Does one system solve a problem the other had?

*Example: DOS was hard to use. Windows and Mac solved that by making computers easier. That's a cause-and-effect connection.*

Now your turn! When you fill out the graphic organizer on the next page, use these questions to help you explain how each operating system connects to the others. Be sure to underline or **highlight** your answers in the passage before you fill out the graphic organizer.

**Directions:** Use the graphic organizer below to help make connections about the passage you read. Then answer the question below. Look back in the passage to find the purpose of each operating system and who used it the most.

Operating System	What Was Its Purpose? What problem did it solve or what was it made to do?	How Is It Connected to the Others? Did it come before or after another system? Did it improve something or do something different?	Who Used It Most? Was it used by everyday people, businesses, or programmers?
DOS	To let users control computers by typing commands.	It was the first system; later systems improved on it.	Early computer users, mostly in offices or tech fields.
Windows			
Mac			

Which operating system do you think made the biggest change and why?

# Knowledge *Check*

**Directions:** Read the passage below, then read each question carefully and select the best answer.

## Windows Changed Computers

In the 1980s, computers were mostly used by businesses and experts. People had to type commands to make the computer work. This was hard for most users. Microsoft wanted to make computers easier, so they created Windows.

The first version of Windows let people use a mouse to click on boxes and pictures. This was new, no more typing long commands. Over time, Windows added more features like folders, menus, and internet tools. Each version made computers easier and faster.

Windows became popular because it was compatible with many different computers. It was used in schools, offices, and homes. Today, Windows is still one of the most used operating systems in the world. Windows helped change how people use computers. It took something hard and made it simple. That's why it's an important part of computer history.

- 1) What kind of connection does the passage make between old systems and Windows?
  - A. Windows made computers harder to use
  - B. Windows replaced typing with clicking
  - C. Windows was the same as DOS
  - D. Windows was used before typed commands
  
- 2) Why did Windows become popular?
  - A. It was free for everyone
  - B. It worked only on Apple computers
  - C. It worked on many types of computers
  - D. It was used only in factories

ANSWER KEY ON PAGE 200

# Knowledge *Check*

- 3) What was different about Windows compared to older systems?
- A. It used typed commands only
  - B. It let users click on pictures and boxes
  - C. It didn't work on many computers
  - D. It was only used by scientists
- 4) Why was the first version of Windows created?
- A. To make computers more expensive
  - B. To help people play games
  - C. To make computers easier to use
  - D. To remove the mouse from computers

ANSWER KEY ON PAGE 200

# Project-Based Learning

## Operating Systems: Past, Present, You

### Driving Question:

How have operating systems changed the way people use computers, and how do those changes affect the way we work and learn today?

### Overview:

You will research the history and purpose of at least three operating systems (e.g., DOS, Windows, Mac, Unix/Linux), and compare how each system was used, who used it, and what problem it solved. You will also create a visual timeline or digital presentation showing how operating systems evolved, and reflect on how these changes affect their own use of technology today.

### Step 1: Explore the Basics

- Research and find short passages or watch a video about operating systems (DOS, Windows, Mac, Unix/Linux).
- Take notes on what each system was used for and who used it.

### Step 2: Compare and Connect

- Use a graphic organizer to compare at least three operating systems.
- Answer questions like:
  - What problem did each system solve?
  - How did it improve or change from the one before?

### Step 3: Create a Timeline or Presentation

- Choose how you want to show your learning:
  - Poster
  - Slide presentation
  - Comic strip
  - Short video
- Include dates, names, and facts that show how operating systems changed over time.

### Step 4: Reflect and Present

- Share your project with a partner or small group.
- Talk about how operating systems affect how you use computers today.

# Student Self-Assessment

# Checklist

## Topic Chosen:

Before you turn in your project, check each box:

### I Can...

- Explain what an operating system does.
- Describe how at least 3 operating systems were used in different time periods.
- Identify who used each system and why.
- Compare how systems have changed over time.
- Explain how each system solved a different problem.
- Make connections between systems using categories or comparisons.
- Present my ideas clearly in writing, speaking, or visuals.
- Use facts from texts or research to support my ideas.
- Explain how operating systems affect how I use computers today.