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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | | |
| **Lesson Identification and TEKS Addressed** | | |
| **Career Cluster** | Information Technology | |
| **Course Name** | Principles of Information Technology | |
| **Lesson/Unit Title** | Keyboard, Mice, and Other Input Devices | |
| **TEKS Student Expectations** | **130.302. (c) Knowledge and Skills**  (4) The student demonstrates knowledge of the hardware components associated with information systems.  (A) The student is expected to identify major hardware components and their functions  (B) The student is expected to use available reference tools as appropriate  (C) The student is expected to connect and use a variety of peripheral devices such as mouse, keyboard, microphone, digital camera, and printer | |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | | |
| **Instructional Objectives** | **Performance Objective:**  Upon completion of this assignment, the student will be able to explain the importance of the input devices, how the computer accepts information from input devices, and the many tasks input devices enable you to perform on the computer.  **Specific Objectives:**   * Describe the function of the keyboard * List the five steps a computer follows when accepting input from a keyboard * Learn the preventive maintenance of the keyboard * Describe the purpose of a mouse and the role it plays in computing * Identify the five essential techniques for using a mouse * Learn the preventive maintenance techniques associated with the mouse * Identify other common input devices | |
| **Rationale** | It is necessary for students to demonstrate proficiency in connecting and using technical devices such as mice, keyboards, microphones, cameras and printers. | |
| **Duration of Lesson** | 45 minutes | |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* |  | |
| **Materials/Specialized Equipment Needed** | **Instructional Aids:**   * Keyboards, Mice, and Other Types of Inputs Quiz * Keyboards, Mice, and Other Types of Inputs Quiz Key * Keyboards, Mice, and Other Types of Inputs Word Search * Teacher-Created Labs Activities (Be creative)   **Materials Needed:**   * Copies of the lab assignments for each student   **Equipment Needed:**   * Personal computer with access to the Internet | |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | **SAY, “**The keyboard was one of the first peripherals to be used withcomputers, and it is still the primary input device for entering text and numbers. Some people believe that when computers can understand handwriting and speech, keyboarding will become unnecessary. But for now, keyboarding remains the most common way to enter text and other data into a computer.”  **ASK, “**Does anyone know how many keys are on a standard keyboard?”*(101**keys arranged in five groups)*  **SAY, “**The mouse first gained widespread recognition in 1984. A mouse letsyou position the cursor anywhere on the screen quickly and easily without having to use the cursor-movement keys. You simply move the pointer to the on-screen position you want, press the mouse button, and the cursor appears at the pre-selected position.”  **ASK, “**What are some other advantages of using a mouse?” (*A mouse also**allows you to create graphics such as lines, curves, and freehand shapes on the screen. The mouse and mouse-based operating systems let you choose commands from easy-to-use menus and dialog boxes so you don’t have to type.)*  **SAY, “**As handy as it is, some people do not like using a mouse or havedifficulty maneuvering one. For these reasons and others, hardware makers have developed various input devices that duplicate the mouse's functionality but interact with the user in diverse ways. The primary goals of these "mouse variants" are to provide ease of use while taking up less space than a mouse. They all remain stationary and can even be built into the keyboard.”  **ASK,** “What are some examples of other input devices?”(*scanners, webcam,**etc.*) | |
| **Direct Instruction \*** | Outline | Instructor Notes |
| 1. Introduction Activity    1. Have students complete the word search to establish familiarity with important terms. 2. Make a Presentation    1. Keyboards       1. Introduction to the keyboard       2. Standard keyboard layout       3. Ergonomic keyboard       4. Function of a keyboard       5. Preventive maintenance of the keyboard    2. Mouse       1. Introduction to the mouse       2. Mouse techniques       3. Preventive maintenance of the mouse    3. Variants of a mouse and other types of inputs       1. Scanner       2. Digital cameras       3. Integrated pointing device       4. Microphones       5. Touch pad       6. pens 3. Have students complete the Keyboards, Mouse, & Input Device Quiz | Have students complete the word search before the lecture.  If necessary, instructor is recommended to make a PowerPoint presentation in conjunction with the lesson outline.  .  See what input devices the students can come up with on their own. |
| **Guided Practice \*** | * Demonstrate each lab principle. * Maintain direct supervision in the lab providing guidance when warranted. * Demonstrate the functions of the buttons of the mouse. Have students open a document, double left-click on a single word and see what happens. Have them right-click on the selected word and see what happens. Have them explain the functions of each buttons. | |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Students work individually on lab assignment; demonstrating their skills in identifying and discussing the various lab requirements and results | |
| **Lesson Closure** | Checking for understanding (Q&A Session)   1. How does the computer receive input from a keyboard? 2. *The keyboard controller detects the keystroke.*   *The controller places a scan code in the keyboard buffer, indicating which key was pressed.*  *The keyboard sends the computer an interrupt request, telling the CPU to accept the keystroke*.   1. What is the purpose of the mouse and the role it plays in computing? 2. *The mouse is a pointing device. You use it to move a graphical pointer on the screen.*   *The mouse can be used to issue commands, draw, and perform other types of input tasks*.   1. What are other variants of input devices? 2. *Track pad, integrated pointing devices, microphone, scanner, digital camera, touch pad, pen* | |
| **Summative/End of Lesson Assessment \*** | **Informal Assessment**  Monitor student progress during independent practice and re-teach/redirect as needed.  **Formal Assessment**  Use Keyboards, Mice and Other Input Devices Quiz and Key. | |
| **References/Resources/**  **Teacher Preparation** |  | |
| **Additional Required Components** | | |
| **English Language Proficiency Standards (ELPS) Strategies** |  | |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  | |
| **Recommended Strategies** | | |
| **Reading Strategies** |  | |
| **Quotes** |  | |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  | |
| **Graphic Organizers/Handout** |  | |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  | |
| **Communication**  **90 Second Speech Topics** |  | |
| **Other Essential Lesson Components** | | |
| **Enrichment Activity**  (e.g., homework assignment) | Students that have mastered the lab assignments can peer tutor students (one-on- one) that are having difficulty with performing the lab. | |
| **Family/Community Connection** |  | |
| **CTSO connection(s)** | SkillsUSA, TSA | |
| **Service Learning Projects** |  | |
| **Lesson Notes** |  | |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)