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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** | Introduction to Basic Web Page Design | |
| **TEKS Student Expectations** | **130.302. (c) Knowledge and Skills**  (1) The student demonstrates professional standards/employability skills as required by business and industry.  (C) The student is expected to employ effective reading and writing skills  (G) The student is expected to demonstrate planning and time-management skills such as storyboarding and project management, including initiating, planning, executing, monitoring and controlling, and closing a project.  (4) The student demonstrates knowledge of the hardware components associated with information systems.  (C) The student is expected to connect and use a variety of peripheral devices such as mouse, keyboard, microphone, digital camera, and printer.  (12) The student applies design and web publishing techniques. The student is expected to:  (A)The student is expected to identify the terminology associated with web page development and interactive media  (E) The student is expected to create a web page containing links, graphics, and text using appropriate design principles.  (13) The student understands and demonstrates legal and ethical procedures as they apply to the use of information technology.  (A) The student is expected to explain and demonstrate ethical use of technology and online resources  (B) The student is expected to adhere to intellectual property laws | |
| **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 create a well-designed basic webpage with a left or top side navigation panel, text header, pictures, external links, and anchor links.  **Specific Objectives:**   1. Define terms associated with web page development 2. Identify purpose and intended audience for web pages 3. Identify qualities of a well-designed web page 4. Discuss safety and copyright implications with publishing a web page 5. Draft a layout sketch for a personal web page 6. Build a personal web page 7. Evaluate finished web pages | |
| **Rationale** | In today’s evolving technical society, students need to know how to design and upload a webpage. | |
| **Duration of Lesson** | Teacher’s Discretion | |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* | **Anchor Link** – Internal link within a webpage that allows the user to “jump to” otherareas of the page.  **Copyright** - The legal right granted to an author, composer, playwright, publisher, ordistributor to exclusive publication, production, sale, or distribution of a literary, musical, dramatic, or artistic work.  **External Link** –A link to another webpage or website.  **HTML Editor** –A software application for creating webpages using the HTML markuplanguage or a WYSIWYG interface.  **Layout Sketch** - A rough sketch outlining the layout and components of a webpage orwebsite.  **Webpage** - A document on the World Wide Web consisting of an HTML file and anyrelated files for scripts and graphics, and often hyperlinked to other documents on the Web.  **Webpage Designer** - Someone who creates well organized and eye pleasing pageswith text, graphics, and color to convey a message to the viewer.  **Webpage Layout** –Web pages either have a left-hand, right-hand, or top layout.  **Website** - A set of interconnected web pages usually including a homepage, generallylocated on the same server, and prepared and maintained as a collection of information by a person, group, or organization.  **WYSIWYG** – “What you see is what you get” editing that is a graphical interface for theHTML language. | |
| **Materials/Specialized Equipment Needed** | **Instructional Aids:**   * Basic Web Page Design Vocabulary Presentation * Web page Vocabulary Sheet * Vocabulary Review Activity Worksheet * Web page Design Activity Worksheet * Web page Planner Rubric * Basic Webpage Rubric * Evaluating Web Pages Checklist   **Materials Needed:**   * HTML editing software   **Equipment Needed:**   * Projector for Presentation * Computer Lab * Internet Access | |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | **SAY, “**Have you ever wondered what’s behind some of the neatwebpages you visit each day on the internet? A **web designer** is someone who creates well-organized and eye-pleasing pages with text, graphics, and color to convey a message to the viewer.”  **ASK,** “Do any of you have social media profiles? These are very basic forms of webpage design because you are using color, graphics, pictures, and text to convey a message about yourself.”  **SAY,** “Today, we will discuss the various aspects of building a basic webpage, and then you will get to build your own personal basic webpage based on what you’ve learned.” | |
| **Direct Instruction \*** | Outline | Instructor Notes |
| 1. Students learn terminology associated with webpage development    1. Anchor link    2. Copyright    3. External link    4. HTML editor    5. Layout sketch    6. Webpage designer    7. Webpage    8. Webpage layout    9. Website    10. WYSIWYG 2. Students identify purpose and intended audience of webpages    1. Purpose of the webpage       1. What message are you trying to convey to anyone who views your webpage?    2. Intended audience of the webpage       1. What pictures and vocabulary should you use? 3. Qualities of a well-designed webpage    1. Well organized, easy to follow    2. Inviting    3. Not “busy”    4. Color – but not too much color   (Teacher should display examples both good and bad of webpage design.)   1. Safety precautions in building and publishing a webpage on the Internet    1. Openness of the Internet – Anyone can view       1. Social Media vs. Open Internet    2. What type of personal information should not be posted on the web?       1. Address, phone, social, etc.    3. Copyright Laws for Web Design       1. What is copyright?       2. Why are copyright laws in place? 2. Draft a layout and text for the webpage    1. Should include placeholders for pictures, the heading, text, anchor, and external links    2. Teacher should display for students an example of a webpage planner/draft or demonstrate on a whiteboard, etc. of how to create the draft/planner.    3. After demonstration, have students complete their own planner 3. Teacher should demonstrate using an HTML editor to students on how to create a basic webpage to include the items shown on planner/draft. 4. Building the webpage using an HTML editor    1. Opening HTML editor software    2. Saving the webpage (.html or .htm)    3. Inserting a table for left-hand layout    4. Creating a text header    5. Inserting pictures – adding text captions    6. Creating links    7. Anchor links    8. External links 5. Evaluate the webpage    1. Well-organized?    2. Color scheme?    3. Is message conveyed easily for viewer?    4. What could make it better?   Have students evaluate the webpages of 3 other students, answering the above questions for each. | Introduce the vocabulary terms using the Basic Webpage Design Vocabulary Presentation.  Hand out the Vocabulary Review Activity Worksheet to the students for them to complete during the vocabulary presentation.  Introduce concepts of design by using the Basic Webpage Design Outline.  If needed, instructor is encouraged to make a PowerPoint presentation in conjunction with the outline.  Encourage the students to comment and discuss the issues.  Hand out the Webpage Design Activity Worksheet to the students for them to complete. Search online for examples of “well-designed” webpages  A great link for FAQs on copyright  [http://www.copyright.gov/help/faq/.](http://www.copyright.gov/help/faq/)  Students continue to complete Design Activity Worksheet. Teacher demonstrates planner creation  Have students complete section 5 of the Design Activity Worksheet – creating a draft/planner for a webpage  Use an HTML to demonstrate creating a webpage.  Students will observe. Ask for one or two volunteers to re-demonstrate in front of peers. Encourage students watching to peer coach and evaluate the student demonstrator on model building techniques  Hand out the Basic Webpage Evaluation Rubric to each student.  Review this with them.  Students will use their planner as a guide while using an HTML editor to create their webpage.  Hand out the Evaluation Checklist to each student. Have them complete the checklist while evaluating 3 other students’ webpages. |
| **Guided Practice \*** | The teacher will demonstrate how to sketch a draft/planner for a webpage. The teacher will build a basic webpage using an HTML editor and HTML editing software to showcase the process/techniques while students observe.  Ask one or two volunteers to re-demonstrate in front of peers. Encourage students watching to peer coach and evaluate the student demonstrator on webpage building techniques. | |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Students will work on their planner and on their personal web pages independently. | |
| **Lesson Closure** | **Review**  **Q&A Session**   1. Why is a layout sketch important in the web design process? 2. *A storyboard allows the designer to visualize how the page will look and where images, text, and links (both anchor and external) will be placed.* 3. What’s the difference between a webpage and a website? 4. *A webpage is a single file document on the World Wide Web consisting of an HTML file and any related files for scripts and graphics, often hyperlinked to other documents on the Web. A website is a set of interconnected webpages usually including a homepage, generally located on the same server, and prepared and maintained as a collection of information by a person, group, or organization.* 5. What are the qualities of a well-designed webpage? 6. *A well-designed webpage is inviting, well organized, colorful without being “busy”, and easy to navigate.* 7. What’s the difference between an anchor link and an external link? 8. *Anchor links are internal links within a webpage that allow the user to “jump to” other areas of the page, while external links are links to another webpage or website.* 9. What type of personal information should not be posted on the web? Why? 10. *Any personally identifying information such as address, phone number, social security number, etc.* 11. What is copyright? 12. *The legal right granted to an author, composer, playwright, publisher, or distributor to exclusive publication, production, sale, or distribution of a literary, musical, dramatic, or artistic work.* 13. Why are copyright laws in place? 14. *To protect the authors, composers, playwrights, publishers, or distributers from their work being stolen or lifted and used without consent by others. It also encourages authors/creators in their efforts by granting them ownership of exclusive rights for their work.*   **Review Activity**   * Teacher will use the Vocabulary Presentation to review with the students. * Teacher will let students discuss responses to review questions listed in summary section above. | |
| **Summative/End of Lesson Assessment \*** | **Informal Assessment**  Teacher will observe student demonstrators and student observers during guided practice to assess understanding of concepts and techniques. Revision/re-teach will occur as needed before moving to Independent Practice portion of the lesson.  Teacher will circulate through the lab as students work on models independently to redirect/re-teach as necessary.  **Formal Assessment**   * Teacher will use Webpage Planner Rubric to evaluate students’ planners * Teacher will use the Basic Webpage Rubric to evaluate students’ webpages | |
| **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) | Once the instructor reviews the web pages, they can be published for the student’s parents to view or entered in various organizational contests for student web design.  Students will use the skills and techniques for web design in future projects.  Create a “web quest” looking at good and poorly designed web pages. | |
| **Family/Community Connection** |  | |
| **CTSO connection(s)** | SkillsUSA, TSI | |
| **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)