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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** | Digital Media |
| **Lesson/Unit Title** | Color Theory – Digital Media |
| **TEKS Student Expectations** | **130.307. (c) Knowledge and Skills**  (5) The student analyzes and applies design and layout principles in digital media.  (F) The student is expected to identify and apply color theory  (G) The student is expected to create and improve digital products by applying the appropriate design and layout principles  (6) The student designs and creates digital graphics.  (A) The student is expected to compare and contrast the characteristics of raster-based bitmap graphics and vector-based graphics |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | Upon completion of this assignment, the student will be able to create a color scheme using appropriate color theory and RGB setting and CYMK values for each color.  **Specific Objectives:**   * Define terminology related to color theory * Identify types of color schemes * Develop a color scheme * Identify the RGB values for drawing objects * Design a color wheel using RGB values * Establish the CYMK values for drawing objects |
| **Rationale** | This Digital Media lesson introduces students to color theory and use. |
| **Duration of Lesson** | 8 hours |
| **Word Wall/Key Vocabulary**  *(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* |  |
| **Materials/Specialized Equipment Needed** | **Instructional Aids:**   * Color Theory Presentation * Color Theory Notes Organizer * Color Theory Notes Organizer Answer Key * Activity #1: Color Scheme Sheets * Activity #2 Instructions: Create a Color Wheel * Activity #3 Instructions: Recreate a Paint Chip Sample * Color Theory Test * Color Theory Test Answer Key   **Materials Needed:**   * + Copies of notes organizer, instruction sheets, and exam   + Colored pencils, color scheme coloring sheet   + Paint chip samples (students can obtain these from local stores that sell paint)   **Equipment Needed:**   * Computer and projector for presentation * Computers with desktop publishing software capable of switching from RGB mode to CYMK mode for individual student use |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | Take a poll of the class on each student’s favorite and least favorite colors. Ask them “If the walls of the room were painted that color, what other colors should be used to decorate the rest of the room?” Write some of the color schemes on the board. Take a poll on the favorite scheme of the class. |
| **Direct Instruction \*** | **Introduction:**  **SAY:** “Have you ever printed something and the color on the printout wasn’t anywhere near the color on your computer screen?”  **SAY:** “Did it make you wonder if your printer ink cartridges needed to be replaced?”  **SAY:** “Did it make you wonder if the monitor settings were off?”  **SAY**: “It’s probable that neither the ink cartridges nor your monitor is at fault. By the end of this unit on Color Theory, you will understand why there is a difference in the color output of the monitor and the printer.”   |  |  | | --- | --- | | 1. Students define terminology related to color theory (slides #5-11) 2. Students identify types of color schemes (slides #12-18) | Use a computer and projector to display part one (slides 1-18) of the presentation: Color Theory.  Use the speaker notes in the presentation to aid with the content of the slides.  Hand out the Color Theory Notes Organizer—1 per student—to aid them in note taking during your presentation. | | 1. Students will develop a color scheme   Activity #1: (Also listed in guided practice below) Students will obtain a color wheel; then they will use their notes organizer to choose colors from the color wheel that represent analogous, split-compliment, triad, harmonious pair, and tetrad color schemes; then they will color a given graphic according to those schemes. | Provide the students with a version of a color wheel (printed or electronic) and cutouts of a rectangle, square, equilateral triangle, and an isosceles triangle (to help them locate colors for a scheme).  Find color wheel images on the internet  Hand out the Activity #1 Color Scheme sheet—1 per student—and review the instructions with the students. | | 1. Students identify RGB values for drawing objects | Use a computer and projector to display part two (slides 19-24) of the presentation: Color Theory.  Have the students continue completing the Note Organizer given out previously. | | 1. Students design a color wheel using RGB values   Activity #2: (Also listed in guided practice below) Students will use their software of choice to draw shapes; then they will fill the shapes with color by setting RGB values to create a color wheel. | Demo how to draw shapes, rotate and move objects, and fill with color using RGB values.  Hand out the Activity #2 instruction sheet—1 per student—and review the instructions. | | 1. Students establish CYMK values for drawing objects   Activity #3: (Also listed in independent practice below) Students will use software to draw shapes and fill the shapes with color by setting CYMK values to recreate paint chip sample colors. | Use a computer and projector to display part three (slides 25-31) of the presentation: Color Theory.  Have the students continue completing the Note Organizer given out previously. Note: Prior to beginning this activity, obtain paint chip samples from a local hardware store that sells paint. | | Students will complete the review activity listed below in the Summary section. | Place the students in pairs or  groups of three for this  activity. | | Students will complete the exam activity listed below  in the Evaluation section. | Have the students do this  individually.  Use the answer key provided  in the lesson documents. | |
| **Guided Practice \*** | Students will obtain a color wheel; then they will use their notes  organizer to choose colors from the color wheel that represent analogous, split-compliment, triad, harmonious pair and tetrad color schemes; then they will color a given graphic according to those schemes. |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | * Students will use their software of choice to draw shapes; then they will fill the shapes with color by setting RGB values to create a color wheel. * Students receive a paint chip sample with 3-4 paint colors on it, and they will use software to create drawing shapes filled with color that match the paint samples. * Students will record both RGB values and CYMK values for each of the colors. They will print the document and staple the paint sample to it. |
| **Lesson Closure** | Have students in pairs ask questions of each other from the lesson note organizers they filled out at the beginning of the lesson. |
| **Summative/End of Lesson Assessment \*** | * Discussion comments during introduction activity * Observation of note-taking during lesson presentation * Guided practice activities * Activity #3: Students set CYMK values and compare to RGB values of same color * EXAM: Questions over Color Theory   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **References/Resources/**  **Teacher Preparation** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **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) | * Have the students create a continuum of color from a tint to a shade using water colors, colored pencils, or drawing objects in an electronic document. * Have the students create a color scheme using computer software while incorporating at least 4 different shapes. Student should list RGB or CYMK values for each color used in the scheme and write a justification/description of the type of color scheme it is. |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | Skills USA  Technology Student Association (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)