**TEXAS CTE LESSON PLAN**

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| **Lesson Identification and TEKS Addressed** | |
| **Cluster** | Education and Training |
| **Course** | Practicum in Education and Training |
| **Lesson/Unit Title** | Integrating Technology in the Classroom |
| **TEKS Student Expectations** | **130.165. (c) Knowledge and Skills**  (5) The student plans and uses effective  instruction.  (B) The student is expected to develop  instructional materials that align with the  Texas Essential Knowledge and Skills  (TEKS).  (E) The student is expected to analyze  concepts for developing effective  instructional strategies.  (G) The student is expected to analyze  instructional strategies for effectiveness.  (9) The student develops technology skills.  (A) The student is expected to recommend  technology applications appropriate for  specific subject matter and student needs.  (B) The student is expected to integrate the  skillful use of technology as a tool for  instruction, evaluation, and management. |
| **Basic Direct Teach Lesson** | |
| **Instructional Objectives** | Students will:   * Identify and define technology * Describe technology applications teachers use in the classroom * Analyze a technology application for various components * Demonstrate the use of a technology application |
| **Rationale** | Technology in our classrooms is here to stay but how do we evaluate what applications are appropriate from the many that are now available? There are technology applications that are game-based, that will assist will classroom management and with instruction. As future teachers, we need to know what applications will work in the classroom and with our students. Let’s find out how we can help teachers find the best applications for their classrooms! |
| **Duration of Lesson** | Four 45-minute class periods |
| **Word Wall** | **Technology:** Providing each student with a laptop or tablet to make learning more individualized, increase independence and extend academics beyond the classroom  **Bring your own device (BYOD):** The practice of allowing the employees of an organization to use their own computers, smartphones, or other devices for work purposes  **Device:** A thing made or adapted for a purpose, especially a piece of mechanical or electronic equipment  **E-Learning:** A web-based learning environment that allows instructors and students to interact through the computer without worrying about time or place  **Electronic classroom:** A classroom equipped with multimedia devices to enhance the learning experience  **Flipped classroom:** Students learn lessons at home with the help of videos or other instructional materials and spend their classroom time doing assignments with help from their instructor  **Integrate:** Combine (one thing) with another so that they become a whole  **Technology:** Machinery and equipment developed from the application of scientific knowledge  **Technology applications:** Curriculum that includes the teaching and learning of technology skills and the use of computers and other related electronic tools |
| **Materials/**  **Specialized Equipment Needed** | **Equipment:**   * Computer with projector for PowerPoint presentation * Computers/laptops with printer capability * Presenter/remote   **Materials:**   * Cardstock * Images of:   + Laptops   + Smart board   + Smart phones   + Tablets * Tablecloth or fabric cover * Copies of all handouts   **PowerPoint:**   * Integrating Technology in the Classroom   **Technology** Free iPad App:   * Digital Learning Revolution – Power on Texas–   Texas Education Agency Now is the time, digital technology is sparking a quiet revolution in Texas, transforming the way teachers teach and students learn.  <https://itunes.apple.com/us/itunes-u/digital-learning-revolution/id409171945?mt=10>  Infographic:   * Ready, set, blend! As we move from the information age to the conceptual age, educators are re-envisioning traditional classroom instruction to help students gain the digital and cognitive skills they need now.  <http://www.iste.org/explore/articleDetail?articleid=196>   **Graphic Organizers:**   * Using Technology in Classroom Today * Using Technology in Classroom Today (Example)   **Handouts:**   * Free Multi-Media Technology Tools * Minute to Pen It! * Rubric for Technology Application * Technology Application Summary * Technology Applications Standards * Technology Applications |
| **Anticipatory Set** | **Before class begins:**  Become familiar with the teacher resource Minute to Pen It!  so that you will understand what to do in this section.  Print images from the Materials or Specialized Equipment Needed tab and place on a table in front of the classroom. Place a tablecloth or fabric cover over the images for this section of the lesson as students will be compiling a list of technology equipment from the last 10 to 15 years.  Note: It is not recommended that you display actual laptops, smartphones, or tablets without proper supervision. Images of the items will suffice to get the idea across.   Ask students the following questions to introduce the technology lesson:   * What is technology? * How has technology changed in the last 10 to 15 years? * Why do we need to use technology in the classroom? * How do you think technology will change in the next 10 to 15 years?   Allow time for responses.  Follow the script on the teacher resource Minute to Pen It!  and lead a discussion with your students as to what technology equipment has been used in the classroom. |
| **Direct Instruction with Special Education Modifications/**  **Accommodations** | Introduce lesson objectives, terms, and definitions.  Select and distribute a handout or graphic organizer such as Education and Training Note-taking (link below) from the Instructional Strategies drop down menu in Classroom Essentials or instruct students to take notes in their journal books or on their own paper.  Distribute the handout Technology Application Standards so that students may review the standards during the slide presentation.  Introduce PowerPoint, Integrating Technology in the Classroom. Students will be expected to take notes while viewing the slide presentation. Allow time for classroom discussion.  View YouTube video:   * An Introduction to Technology Integration  Integrating technology with classroom practice can be a great way to strengthen engagement by linking students to a global audience, turning them into creators of digital media, and helping them practice collaboration skills that will prepare them for the future. <http://youtu.be/d59eG1_Tt-Q>     *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * providing students with a copy of the presentation * check for understanding |
| **Guided Practice with Special Education Modifications/**  **Accommodations** | Now that technology equipment has been discussed, how that equipment is being used in the classroom will be explored.  Divide the class into subgroups of three or four students.  Distribute the handout Using Technology in Classrooms Today to each group and instruct the groups to brainstorm ways teachers use technology in the classroom by using each letter of the word technology with an example. If instruction clarification is needed, model the activity process with one of the letters. Check for understanding.  A teacher resource Using Technology in Classrooms Today (Example) is included to assist students as they collaborate with each other.  If your school district has a grading management system available, display some of the time-saving applications that are available such as attendance, grade averaging and percentages. Be careful not to display confidential information.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * assist with spelling if needed * extra time for written response |
| **Independent Practice/Laboratory Experience with Special Education Modifications/**  **Accommodations** | Distribute Before class begins, print the Technology Applications on cardstock, cut apart and separate. Place the cards in a basket.  Reference the Free Multi-Media Technology Tools if needed.  There are many technology applications that are available for teachers to use in the classroom. Begin with this list or add any other applications that you may have heard of.   Divide the class into subgroups of two. Allow one partner to pick a technology application card to analyze and evaluate.  Read the following scenario:  With new technology applications being introduced every day, it is time-consuming for the already over-whelmed teacher to learn all the components for even one application. How could you and your partner assist teachers in exploring which application would best work in the classroom?  Distribute the handout Technology Application Summary (see All Lesson Attachments tab) and instruct students to investigate the application chosen, answer the questions and be able to demonstrate the program to the class.  Distribute the Rubric for Technology Application (see All Lesson Attachments tab) so that students understand what is expected.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * providing students with a copy of the presentation * correcting for spelling and grammar but do not deduct from total on homework * providing individual assistance, as needed |
| **Lesson Closure** | Review objectives, terms, and definitions.  Review the word cloud created in the Anticipatory Set.  Students will have a visual of how technology has improved in the last 10 to 15 years.  Ask the students the following questions:   * As future teachers, what would you like to see in the classrooms of the future? * How do you see technology improving? * If you could create a technology application to use in the classroom right now, what would it be? * Will you be able to keep up with the digital natives? |
| **Summative/End of Lesson Assessment with Special Education Modifications/**  **Accommodations** | Students will present the technology applications.  Projects will be assessed with the appropriate rubric.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * extended time * praise participation |
| **References/**  **Resources** | **Images:**   * Photos obtained through a license with Shutterstock™.   **Websites:**   * Steven Ballmer. (2015). In Encyclopedia Britannica. Retrieved from  <http://www.britannica.com/EBchecked/topic/1780135/Steven-Ballmer> * U.S. Department of Education Part D — Enhancing Education Through Technology <http://www2.ed.gov/policy/elsec/leg/esea02/pg34.html>   **YouTube:**   * An Introduction to Technology Integration:  Integrating technology with classroom practice can be a great way to strengthen engagement by linking students to a global audience, turning them into creators of digital media, and helping them practice collaboration skills that will prepare them for the future. <http://youtu.be/d59eG1_Tt-Q> |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** | * Word wall * Draw visual representations of terms on word wall * Visual representations of 16 Career Clusters™ * <http://www.learnerdictionary.com> for pronunciation and meaning of terms |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** | **Other articles pertaining to this lesson include:**   * Pros and Cons Technology in the Classroom: Having more computers in schools could improve the level of instruction and address many of the problems in schools. The real pros and cons of using technology in the classroom create a stalemate that can prevent technology from being used more widely in the classroom. <http://www.ehow.com/about_5384898_pros-cons-technology-classroom.html> * Types of Technology Used in the Classroom: Gone are the days when the teacher stood in the front of the classroom and lectured while students simply took notes. Today the classroom is an interactive world where the teacher as well as the student is engaged with technology. <http://www.ehow.com/about_5437063_types-technology-used-classroom.html> * Ways to Use Technology in an Elementary Classroom: As technology expands and improves, younger children are becoming more tech-savvy. As a result, it is becoming more difficult to reach children in the classroom without incorporating some degree of technology into the lesson plans.  <http://www.ehow.com/list_6071749_ways-use-technology-elementary-classroom.html>   **Reading Strategy** Encourage students to “visualize” as they read. Many students are visual learners and will benefit from making sketches or diagrams on scrap paper as they read. Providing students with graphic organizers to help them organize their thoughts is also helpful. |
| **Quotes** | There can be infinite uses of the computer and of new age technology, but if teachers themselves are not able to bring it into the classroom and make it work, then it fails  **-Nancy Kassebaum**  Teaching in the Internet age means we must teach tomorrow’s skills today  **-Jennifer Fleming**  We need technology in every classroom and in every student and teacher’s hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world  **-David Warlick**  It is not about the technology; it’s about sharing knowledge and information, communicating efficiently, building learning communities and creating a culture of professionalism in schools. These are the key responsibilities of all educational leaders  **-Marion Ginapolis**  Education is evolving due to the impact of the internet. We cannot teach our students in the same way we were taught. Change is necessary to engage students not in the curriculum we are responsible for teaching, but in school. Period  **-April Chamberlain** |
| **Writing Strategies** | **Journal Entries:**   * Technology is important to me because … * Being able to use technology in the classroom will enable me to … * I prefer a computer/laptop/tablet/smartphone to work on my school assignments because … * The technology application that I use the most is …   **Writing Strategy:**  RAFT   * Role: student * Audience: future teachers * Format: informative letter * Topic: utilizing technology in the classroom   Write a letter to your teacher letting them know how you would utilize technology in the classroom |
| **Communication 90 Second Speech Topics** | * Three types of technology applications that may be used for classroom management are … * Student skills may be evaluated in these three technology applications … |
| **Other Essential Lesson Components** | |
| **Enrichment activity** | Allow Assign second year practicum students to write the technology lesson plan for the grade level they work with.  Students could use Microsoft Word™ or other software to make a chart of the various types of educational technology available.  Invite a member of the technology department to speak to the class about the latest updates on educational technology.  **Infographic:**  Infographics are graphic visual representations of information, data or knowledge intended to present complex information quickly and clearly.  The infographic below is related to this lesson. Allow students to view the image on a projector and lead a discussion concerning the information provided.   * Ready, set, blend! As we move from the information age to the conceptual age, educators are re-envisioning traditional classroom instruction to help students gain the digital and cognitive skills they need now.  <http://www.iste.org/explore/articleDetail?articleid=196> |
| **Family/Community Connection** | Students can create a T-chart comparing the technology their parents used in the same grade level that they are in so they can visualize how fast technology moved. They may add an insert at the bottom depicting what they think future technology may be. |
| **CTSO connection** | Family, Career, and Community Leaders of America (FCCLA)<http://texasfccla.org>  **STAR Events:**   * Teach and Train An individual event – recognizes participants for their exploration of the education and training fields through research and hands-on experience. * FCCLA Chapter Website An individual or team event, recognizes participants who use a chapter website to educate, inform and involve members and the public about the importance of the family and consumer sciences program and the FCCLA chapter. * Digital Stories for Change An individual or team event, recognizes participants who demonstrate their knowledge, skills, and abilities to actively identify an issue concerning families, careers, or communities; research the topic; and develop a digital story to advocate for positive change.   **Texas Association of Future Educators (TAFE)**  <http://www.tafeonline.org/>   * Educational Leadership Fundamentals – This competition is an individual event that recognizes participates who take a 30-minute timed exam about knowledge of the teaching profession. * Technology Video Competition This competition is a team event of two to four participants that recognizes participates who tell a compelling story about their firsthand experiences with technology in education. |
| **Service Learning Projects** | Successful service learning project ideas originate from student concerns and needs. Allow students to brainstorm about service projects pertaining to the lesson. For additional information on service learning see:<http://www.nylc.org/>  Possible idea:  Host a technology fair for parents in the school library showcasing some of the various technology applications your campus uses. Instruct parents to bring their smart phone or tablet with them. |

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)