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| **TEXAS CTE LESSON PLAN**[www.txcte.org](http://www.txcte.org) |
| **Lesson Identification and TEKS Addressed** |
| **Career Cluster** | Hospitality and Tourism |
| **Course Name** | Principles of Hospitality and Tourism |
| **Lesson/Unit Title** | Technology in the Hospitality and Tourism Industry |
| **TEKS Student Expectations** | **130.252. (c) Knowledge and Skills**(6) The student uses technology to gather information. The student is expected to:(A) understand the need for computer applications to perform workplace tasks(B) recognize that types of computerized systems are used to manage operations and guest services in the hospitality and tourism industry (C) discuss why computerized systems are used in operations and guest services in the hospitality and tourism industry |
| **Basic Direct Teach Lesson**(Includes Special Education Modifications/Accommodations and one English Language Proficiency Standards (ELPS) Strategy) |
| **Instructional Objectives** | **Students will:*** identify technology equipment use in the hospitality and tourism industry
* analyze a point of sale application
* evaluate hospitality and tourism websites for local venues
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| **Rationale** | Technology in the hospitality and tourism industry is rapidly changing to meet the needs of the customer/guest and to increase employee efficiency and overall company productivity. Knowledge of programs in the industry is vital for future employment. Let’s find out what is available! |
| **Duration of Lesson** | Three 45-minute class periods |
| **Word Wall/Key Vocabulary***(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* | **Point-of-sales system (POS):** A computerized system for recording an order at the place where the order is taken**Property management system (PMS):** The computer software and hardware used to run lodging properties; keeps all the information for all departments in one computer system**Technology:** The application of scientific knowledge for practical  purposes, especially in industry**Wi-Fi:** A facility allowing computers, smartphones, or other devices to connect to the Internet or communicate with one another wirelessly within an area**Wireless communication:** The transfer of information between two or more points that are not connected by an electrical conductor such as a radio |
| **Materials/Specialized Equipment Needed** | **Equipment:*** Computer with projector for multimedia presentation
* Computers with internet access (be sure to follow district guidelines)
* Light projector (Elmo)
* Cash register (if available)
* iPad/iPhone

**Materials:*** Guest tickets
* Menus (various)

**Supplies:*** Hotel bell
* Hotel card keys
* Front desk sign
* Luggage
* Copies of handouts

**PowerPoint:*** Technology in the Hospitality and Tourism Industry

**Technology:*** Infographic:
	+ Adding Technology to the Menu There is no doubt that technology is changing how restaurant personnel and guests interact with each other. Because of this, the National Restaurant Association has created an infographic to show what the future may hold when it comes to ordering and payment options, apps, and social media. <http://www.restaurant.org/Restaurant/media/Restaurant/News%20photos/NRA-Infographic.jpg>
* TEDx Talk:
	+ Pattie Maes + Pranav Mistry: Meet the SixthSense interaction This demo from Pattie Maes’ lab at MIT, spearheaded by Pranav Mistry was the buzz of TED. It’s a wearable device with a projector that paves the way for profound interaction with our environment. Imagine “Minority Report” and then some.<http://www.ted.com/talks/pattie_maes_demos_the_sixth_sense>

**Graphic Organizers:*** PMS vs POS
* PMS vs POS (Key)

**Handouts:*** Current and Future Technology Use in the Hospitality Industry
* Hospitality and Tourism Technology Reflection
* Hospitality and Tourism Website Information Evaluation
* Note-Taking: Technology in the Hospitality and Tourism Industry
* The ABC’s of Technology

The ABC’s of Technology (Examples) |
| **Anticipatory Set**(May include pre-assessment for prior knowledge) | **Before class begins:**Note to teacher: Become familiar with the point of sales app:* Mobi Pos Lite (free) (ios only) The ideal point of sale application for restaurants, coffee shops, bakeries and kiosk.<https://itunes.apple.com/us/app/mobi-pos-point-of-sale-lite/id597234266?mt=8>

Download the app and open the settings to personalize with the name of a restaurant, sales tax (8.25%) and any other information that may be needed. Display as many items from the Materials or Specialized Equipment Needed tab as you have available on a table in front of the room so that students may view as they enter.Divide the class into subgroups of four.Explain to the class that technology has made many advances in the last 10 years.Distribute the handout The ABC’s of Technology and instruct the groups to generate a list of technology equipment or programs they are familiar with. Allow students 10 minutes for this activity.Ask the following questions:* Did anyone complete all 26 letters?
* Are you familiar with all of the technology listed?
* What technology equipment have you used?
* What do you think technology will look like in 10 years? 20 years?
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| **Direct Instruction \*** | Review lesson objectives, terms, and definitions.Distribute graphic organizers Note-Taking: Technology in the Hospitality and Tourism Industry and PMS vs POS Systems so students may take notes while viewing the slide presentation.Introduce PowerPoint Technology in the Hospitality and Tourism Industry. Follow slide presentation script and discuss details with your students. Allow time for them to take notes.View video:* Technology is set to invade a restaurant near you in 2015  2015 may well be the year that restaurants across the country put guests in control of their own dining experience by allowing them to place orders and pay their checks via tablets and place orders before they get to the counter. <http://www.usatoday.com/media/cinematic/video/23130327/technology-is-set-to-invade-a-restaurant-near-you-in-2015/>

*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:** checking for understanding
* providing assistance with note-taking
* preferred seating
 |
| **Guided Practice \*** | If your school is not BYOD/BYOT, then connect your tablet to a light projector and allow students to take turns taking orders from guests.*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:** encourage participation
* praise effort
 |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Divide the class into subgroups of two.Read the following scenario to the class.Technology in the hospitality and tourism industry has improved with the Internet. Customers for airlines, amusement parks, car rentals, hotels, recreations sites, restaurants and other hospitality venues can now review the company websites on computers, tablets, and mobile phones before purchasing items.  You have been chosen to participate as a “secret shopper” to evaluate three company websites from venues in your city/town. What will you look for in a website?Distribute the handout Hospitality and Tourism Website Information Evaluation.Instruct the students to evaluate three local hospitality and tourism websites from the Career Cluster Programs of Study using computers, tablets, or smartphones.Options: #1. If computers, tablets, or smartphones are not available for use in your classroom, this handout may be assigned to be completed at home. #2. Connect the computer or tablet to a projector and complete the assignment as a class.*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:** assisting student in gathering information
* check for understanding
 |
| **Lesson Closure** | Review the handout The ABC’s of Technology from the Anticipatory Set and ask your students if there are any more equipment or supplies they can add to the list.Discuss ideas for future technology equipment or programs. |
| **Summative/End of Lesson Assessment \***  | Distribute the handout Hospitality and Tourism Technology Reflection and encourage students to take another look at what they have learned and write about it.*Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:** shortened assignment
* check for understanding
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| **References/Resources/****Teacher Preparation** | **Journal:*** Brewer, P., Kim, J., Schrier, T., & Farrish, J. (2008). Current and Future Technology Use in the Hospitality Industry.

**Textbook:*** Reynolds, Johnny Sue. (2010). *Hospitality Services.* Tinley-Park, Illinois: The Goodheart-Willcox Company.

**Video:*** Technology is set to invade a restaurant near you in 2015  2015 may well be the year that restaurants across the country put guests in control of their own dining experience by allowing them to place orders and pay their checks via tablets and place orders before they get to the counter. <http://www.usatoday.com/media/cinematic/video/23130327/technology-is-set-to-invade-a-restaurant-near-you-in-2015/>
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| **Additional Required Components** |
| **English Language Proficiency Standards (ELPS) Strategies** | * Word wall
* Draw visual representations of terms on word wall
* Add terms and definitions to personal dictionary
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| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** |
| **Reading Strategies** | Other articles pertaining to this lesson that students may read include:* Hotel Management Information System Management information systems represent the approach a company takes to gather information used to make business decisions.<http://www.ehow.com/facts_7258540_hotel-management-information-system.html>
* How Do POS Systems Work? point-of-sale systems save you time by capturing real-time data on purchase transactions and providing estimates of market share and product sales.<http://www.ehow.com/how-does_4922753_pos-systems-work.html>
* Information Technology for Hotel & Restaurant Management Information technology streamlines nearly every aspect of operations in the hospitality industry, from managing hotel reservations to facilitating communication between restaurant servers and chefs in the kitchen.<http://www.ehow.com/facts_6976315_information-technology-hotel-restaurant-management.html>
* The Advantages & Disadvantages of Point of Sale System You can choose a traditional cash register, which keeps track of the money your business has taken in each day, or a point of sale system that provides a number of additional features as well.<http://www.ehow.com/info_11369852_advantages-disadvantages-point-sale-system.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** | The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn’t think they could learn before, and so in a sense it is all about potential.**-Steve Ballmer**What new technology does is create new opportunities to do a job that customers want done.**-Tim O’Reilly**We think of Foursquare as a technology that’s enabling these superpowers… to see around corners and through walls; it’s like, I want to find the best stuff that exists within, you know, 100 yards, 5 miles, 10 miles of me. I walked into a restaurant, and it told me what to order. I walked into a neighborhood, and it told me three places to go to.**-Dennis Crowley** |
| **Writing Strategies****Journal Entries + 1 Additional Writing Strategy** | **Journal Entries:*** I enjoy using technology because …
* Technology is …
* The hospitality and tourism industry values technology because …

**Writing Strategy:**RAFT (Role/Audience/Format/Topic) writing strategy:* Role – IT person
* Audience – corporate office
* Format – pamphlet
* Topic – new technology guide

A new technology program is being implemented and you have to write a simple guide for management to be able to understand. |
| **Communication****90 Second Speech Topics** | * Three things that the property management system in hotels can do are …
* The two main features of a point of sales systems are …
 |
| **Other Essential Lesson Components** |
| **Enrichment Activity**(e.g., homework assignment) | * Students may compare the document Current and Future Technology Use in the Hospitality Industry written in 2008 to current trends in the industry used today.
* Students may write a reflection as to how they could improve technology in the hospitality and tourism industry.

**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.* Adding Technology to the Menu There is no doubt that technology is changing how restaurant personnel and guests interact with each other. Because of this, the National Restaurant Association has created an infographic to show what the future may hold when it comes to ordering and payment options, apps, and social media. <http://www.restaurant.org/Restaurant/media/Restaurant/News%20photos/NRA-Infographic.jpg>

**TED Talks:**TEDx is a program of local, self-organized events that bring people together to share a TED-like experience. At a TEDx event, TEDTalks videos and live speakers combine to spark deep discussion and connection in a small group. These local, self-organized events are branded TEDx, where x = independently organized TED event.The video below is related to this lesson. Allow students to view the video, and lead a discussion concerning the TED Talk.* Pattie Maes + Pranav Mistry: Meet the SixthSense interaction This demo from Pattie Maes’ lab at MIT, spearheaded by Pranav Mistry was the buzz of TED. It’s a wearable device with a projector that paves the way for profound interaction with our environment. Imagine “Minority Report” and then some.<http://www.ted.com/talks/pattie_maes_demos_the_sixth_sense>
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| **Family/Community Connection** | Invite a manager from the hospitality industry to speak to the class about how technology is used in their venues. |
| **CTSO connection(s)** | **Family, Career and Community Leaders of America**<http://www.fcclainc.org>Hospitality, Tourism and Recreation An individual or team event, recognizes participants who demonstrate their knowledge of the hospitality, tourism, and recreation industries and ability to translate their knowledge into a hypothetical or real business. Project must relate to culinary, lodging, recreation, tourism or event coordination. |
| **Service Learning Projects** | Successful service learning project ideas originate from student concerns and needs. Allow students to brainstorm about service projects pertaining to this lesson.[www.ysa.org](http://www.ysa.org)Possible ideas:Students that are tech savvy may volunteer to teach senior citizens who are not familiar with computer programs how to use the programs. |

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)