Unit 3: Food Safety - HACCP

Content Area: **CTE**
Course(s): **Adv Cul Arts**
Time Period: **October**
Length: **8 days-ongoing/grade 12**
Status: **Published**

Title Section

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Advanced Culinary Arts

Grade 12

Food Safety - HACCP

Belleville Board of Education

102 Passaic Avenue

Belleville, NJ 07109

Prepared by: Mrs. J. Worster

Dr. Richard Tomko, Ph.D., M.J., Superintendent of Schools

Ms. LucyAnn Demikoff, Director of Curriculum and Instruction K-12

Ms. Nicole Shanklin, Director of Elementary Education K-8, ESL Coordinator K-12

Mr. George Droste, Director of Secondary Education

Board Approved: September 23, 2019

Unit Overview

Food becomes contaminated by exposure to harmful microorganisms, physical contaminants or chemical substances. There are three types of hazards that can cause contamination in a kitchen: physical, biological, and chemical. Food often becomes contaminated through improper handling. It is essential for foodhandlers to prevent the spread of foodborne illness. All the guidelines for keeping food safe to eat can be summed up in four basic steps – clean, separate, cook, and chill. Foodservice professionals need to know how to create a clean, safe, disease-free place that can be used for food preparation. Foodservice workers need to develop and to practice skills to prevent and properly respond to foodborne illness outbreaks. Sanitation is a continuous part of good, safe food production. The food industry is regulated by laws, health codes and work place standards at the local, state and federal levels. Understanding and putting these guidelines into practice is essential to ensuring food safety.

Enduring Understanding

Students will be able to:

- identify hazards that can cause food borne illnesses.
- identify foods that are time and temperature controlled for safety.
- demonstrate proper food storage and handling that is essential to safe food preparation.
- explain how allergic reactions to foods can be fatal to certain people.
- demonstrate proper personal hygiene practices that are essential for avoiding food borne illness.

- demonstrate sanitation rules and regulations are a legal requirement of the food industry.
- demonstrate sanitary procedures and kitchen practices.
- utilize proper personal hygiene and sanitary guidelines to avoid food-borne illness.
- demonstrate proper food receiving and inspection.
- demonstrate proper food handling and storage of raw and prepared foods avoiding cross contamination.
- utilize proper temperature control and holding to avoid food-borne illness.
- identify allergenic sensitive foods

Essential Questions

- Is student able to evaluate academic and career skills related to school and employment?
- Can student identify and explain the temperature range of the Danger Zone?
- Is student able to three types of hazards that contaminate food?
- Can student identify the pathogens related to certain foods and health symptoms?
- Is student able to identify TCS foods?
- Can the student accurately measure a foods temperature?
- Is student able to identify allergenic sensitive foods?
- Can student explain and demonstrate proper food handling practices, personal cleanliness, and kitchen sanitary guidelines to avoid and prevent food-borne illness?
- Is student able to control the growth of food related pathogens?
- Can student demonstrate proper food storage procedures?
- Can student describe and demonstrate methods to avoid cross-contamination?
- Can student describe and demonstrate food industry standards to avoid food borne illness?

Exit Skills

Students will be able to:

- identify hazards that can cause food borne illnesses.
- identify foods that are time and temperature controlled for safety.
- demonstrate proper food storage and handling that is essential to safe food preparation.
- explain how allergic reactions to foods can be fatal to certain people.
- demonstrate proper personal hygiene practices that are essential for avoiding food borne illness.
- demonstrate sanitation rules and regulations are a legal requirement of the food industry.
- demonstrate sanitary procedures and kitchen practices.
- utilize proper personal hygiene and sanitary guidelines to avoid food-borne illness.

- explain and practice the steps in HACCP
- demonstrate proper food receiving and inspection.
- demonstrate proper food handling and storage of raw and prepared foods avoiding cross contamination.
- utilize proper temperature control and holding to avoid food-borne illness.
- identify allergenic sensitive foods

New Jersey Student Learning Standards (NJSLS-S)

9.3.12.ED.1	Apply communication skills with students, parents and other groups to enhance learning and a commitment to learning.
9.3.12.ED.2	Demonstrate effective oral, written and multimedia communication in multiple formats and contexts.
9.3.12.ED.3	Use critical thinking to process educational communications, perspectives, policies and/or procedures.
9.3.12.ED.4	Evaluate and manage risks to safety, health and the environment in education and training settings.
9.3.HT.5	Identify potential, real and perceived hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace.
9.3.12.ED.9	Describe state-specific professional development requirements to maintain employment and to advance in an education and training career.
9.3.12.ED.10	Apply organizational skills and logic to enhance professional education and training practice.
9.3.HT-RFB.2	Demonstrate safety and sanitation procedures in food and beverage service facilities.
9.3.HT-RFB.4	Demonstrate leadership qualities and collaboration with others.

Interdisciplinary Connections

LA.RST.11-12.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
LA.RST.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
LA.WHST.11-12.8	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
LA.WHST.11-12.10	Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks,

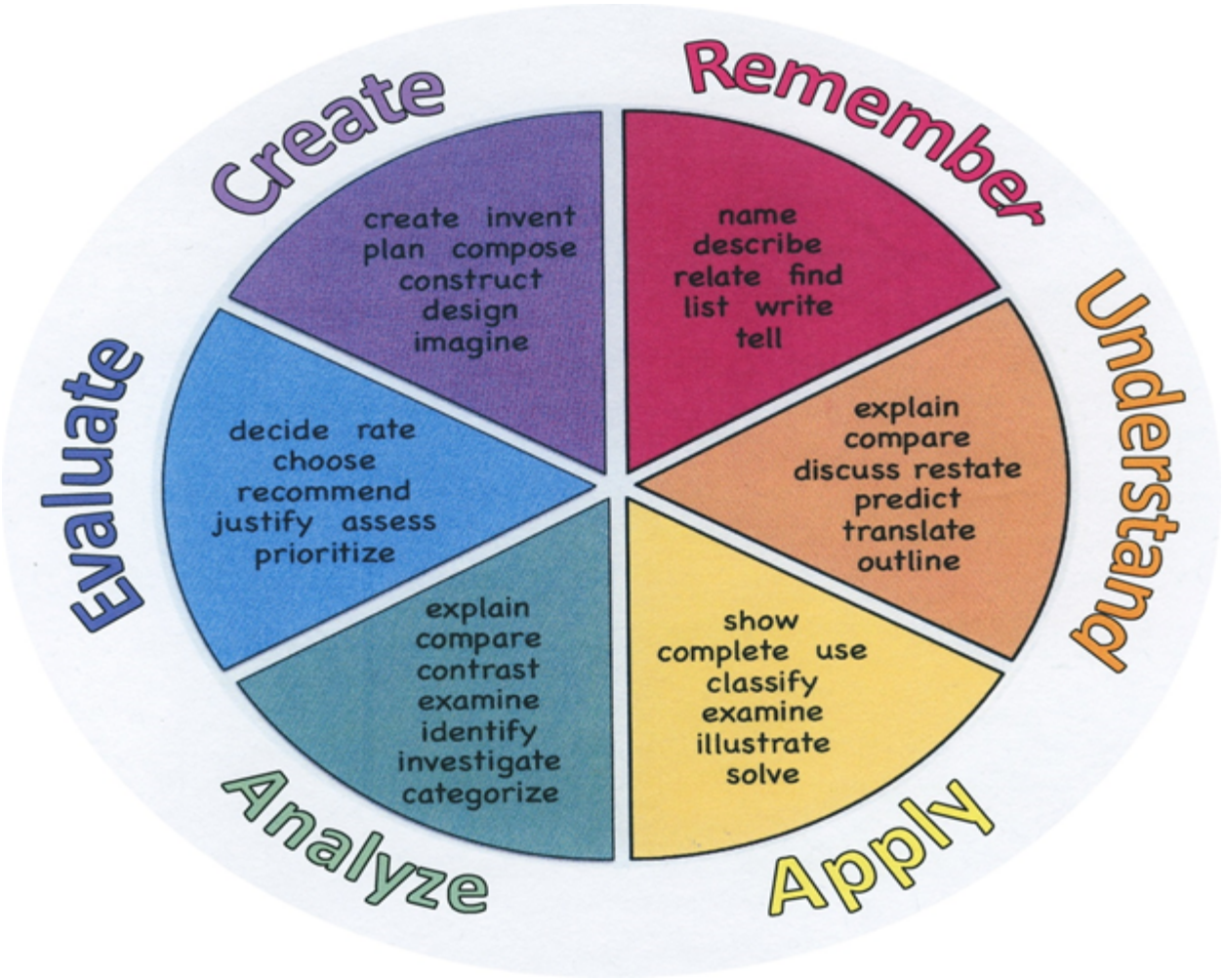
purposes, and audiences.

Learning Objectives

Students will demonstrate the ability to:

- identify and explain the purpose of the HACCP system.
- outline the HACCP processes of monitoring, corrective action, record keeping and verification.
- apply and monitor the HACCP steps to the cooking process to avoid food handling hazards.
- construct an informative brochure identifying sanitation guidelines and procedures to prevent food borne illness.
- describe and demonstrate methods to avoid cross-contamination.
- describe and demonstrate food industry standards to avoid food borne illness.

Remember	Understand	Apply	Analyze	Evaluate	Create
Choose	Classify	Choose	Categorize	Appraise	Combine
Describe	Defend	Dramatize	Classify	Judge	Compose
Define	Demonstrate	Explain	Compare	Criticize	Construct
Label	Distinguish	Generalize	Differentiate	Defend	Design
List	Explain	Judge	Distinguish	Compare	Develop
Locate	Express	Organize	Identify	Assess	Formulate
Match	Extend	Paint	Infer	Conclude	Hypothesize
Memorize	Give Examples	Prepare	Point out	Contrast	Invent
Name	Illustrate	Produce	Select	Critique	Make
Omit	Indicate	Select	Subdivide	Determine	Originate
Recite	Interrelate	Show	Survey	Grade	Organize
Select	Interpret	Sketch	Arrange	Justify	Plan
State	Infer	Solve	Breakdown	Measure	Produce
Count	Match	Use	Combine	Rank	Role Play
Draw	Paraphrase	Add	Detect	Rate	Drive
Outline	Represent	Calculate	Diagram	Support	Devise
Point	Restate	Change	Discriminate	Test	Generate
Quote	Rewrite	Classify	Illustrate		Integrate
Recall	Select	Complete	Outline		Prescribe
Recognize	Show	Compute	Point out		Propose
Repeat	Summarize	Discover	Separate		Reconstruct
Reproduce	Tell	Divide			Revise
	Translate	Examine			Rewrite
	Associate	Graph			Transform
	Compute	Interpolate			
	Convert	Manipulate			
	Discuss	Modify			
	Estimate	Operate			
	Extrapolate	Subtract			
	Generalize				
	Predict				



Suggested Activities & Best Practices

- Create an informative poster illustrating the flow of food.
- Construct a Power Point presentation demonstrating the steps in the HACCP system.
- Construct an informative brochure identifying sanitation guidelines to prevent food borne illnesss.
- Identify, label and apply HACCP steps within the culinary classroom to ensure food safety.

Assessment Evidence - Checking for Understanding (CFU)

- Common Benchmarks
- Unit 3 Test-summative assessment
- Informative Chart
- Unit Review/Test prep
- Study Guides
- Evaluation Rubrics
- Teacher Observation Checklist
- Self Assessment
- Explaining-formative assessment
- Teacher Student Conference-alternate assessment
- Create an informative poster illustrating the flow of food.-benchmark assessment

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation rubrics
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar

- Study Guide
- Surveys
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit review/Test prep
- Unit tests
- Web-Based Assessments
- Written Reports

Primary Resources & Materials

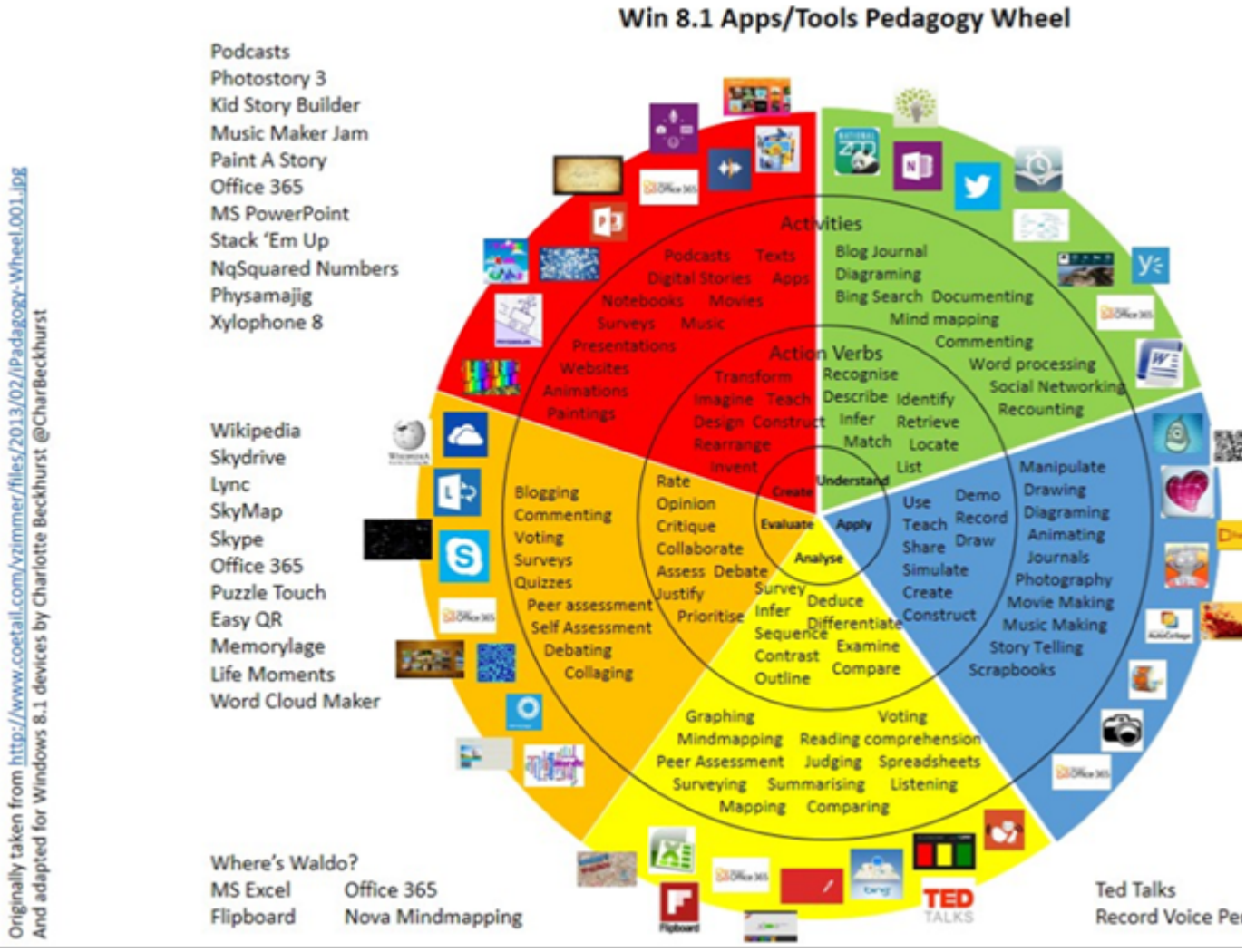
- Textbook: *Guide to Good Food*
- Textbook: *Culinary Essentials*
- Textbook – *Foundation of Restaurant Management*
- Video Clip: The HACCP System
- Brochure Publisher
- Power Point Presentations
- Internet

Ancillary Resources

- Career Training Education Presentations/Discussions
- The Food Industry
- Video – HACCP Study Guide
- Chapter worksheets/questions
- Filling out culinary learning logs

Technology Infusion

- Google Classroom
- Interactive Smart TV Technology
- Technology Internet Research and Word Processing
- Video Demonstration
- Calculations
- Online Appliancations
- Power Point



Alignment to 21st Century Skills & Technology

- Communication Skills – English, Reading, Writing
- Mathematics
- Economics
- Science
- Social Skills/Interpersonal Skills

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP3	Attend to personal health and financial well-being.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.C	Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
TECH.8.1.12.E	Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.

21st Century Skills/Interdisciplinary Themes

- Communication and Collaboration
- ICT (Information, Communications and Technology) Literacy
- Interpersonal Communication
- Critical Thinking and Problem-Solving
- Financial, Economic, Business and Entrepreneurial Literacy
- Life and Career Skills

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- ICT (Information, Communications and Technology) Literacy
- Information Literacy
- Life and Career Skills
- Media Literacy

21st Century Skills

Students will be able to use their learning to …

- Use effective oral and written communication strategies for creating, expressing, and interpreting information and ideas.
- Use critical and creative thinking strategies to facilitate innovation and problem-solving both independently and in teams.
- Use technology is used to access, manage, integrate, and disseminate information.
- Use effective leadership and teamwork strategies to foster collaboration and cooperation to accomplish goals.
- Develop life skills in order to achieve continuing success in various life roles related to continuing education, career development, and personal growth.

- Develop employable skills to build the capacity for successful careers.

- Civic Literacy
- Environmental Literacy
- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness
- Health Literacy

Differentiation

Differentiations:

- Small group assignments
- Added time to complete assignments
- Pairing oral instructions with visuals
- Repeat directions as needed
- Reinforcing on-task behaviors and skill acquisition
- Reduce amount of assignments that are due
- Rephrase written directions
- Study guides provided
- Additional time for skill mastery
- Test read to student
- Visual presentation
- Small Group Instruction
- Additional Time

Hi-Prep Differentiations:

- Project-based Learning
- Problem-based Learning

Lo-Prep Differentiations

- Goal Setting with Students
- Mini Workshops to re-teach or extend skills

Special Education Learning (IEP's & 504's)

- Study Guides/Board Notes
- Additional Time for Skill Mastery
- Assistive Technology
- Computer or Electronic Device Utilizes
- Multi-sensory Instruction
- Preferential Seating
- Student Working with an Assigned Partner
- Small Group Instruction
- Check Work Frequently for Understanding
- Extended Time on Tests/Quizzes

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length
- multi-sensory presentation
- multiple test sessions
- preferential seating
- preview of content, concepts, and vocabulary
- Provide modifications as dictated in the student's IEP/504 plan
- reduced/shortened reading assignments
- Reduced/shortened written assignments
- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

English Language Learning (ELL)

- Teach Key Concepts
- Visual Teaching Aids: Videos, Illustrations, Pictures and Drawings
- Use of note cards, study guides and open book during testing
- Small Group Instruction
- Student Working with an Assigned Partner
- Preview of Content, Concepts, and Vocabulary
- Check Work Frequently for Understanding
- Peer Tutoring

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarif
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning;
- allowing students to correct errors (looking for understanding)
- allowing the use of note cards or open-book during testing
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using computer word processing spell check and grammar check features
- using true/false, matching, or fill in the blank tests in lieu of essay tests

At Risk

- using videos, illustrations, pictures, and drawings to explain or clarify
- teaching key aspects of a topic. eliminate nonessential information
- tutoring by peers
- providing study guides
- allowing students to correct errors (looking for understanding)
- allowing products to demonstrate student's learning
- using authentic assessments with real-life problem-solving

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives

- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Talented and Gifted Learning (T&G)

- Create a plan to solve an issue presented in the class or in a text
- Advanced problem-solving
- Higher order, critical and creative thinking skills, and discovery
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize project-based learning for greater depth of knowledge

- Above grade level placement option for qualified students
- Advanced problem-solving
- Allow students to work at a faster pace
- Cluster grouping
- Complete activities aligned with above grade level text using Benchmark results
- Create a blog or social media page about their unit
- Create a plan to solve an issue presented in the class or in a text
- Debate issues with research to support arguments
- Flexible skill grouping within a class or across grade level for rigor
- Higher order, critical & creative thinking skills, and discovery
- Multi-disciplinary unit and/or project
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize exploratory connections to higher-grade concepts
- Utilize project-based learning for greater depth of knowledge

Sample Lesson

See first unit: Employability and Career Development for an example