Middle-level CTE Learning Experience Title: Prototype Toys Educator: Beka Stoll, Valley Central Schools Length of Lesson: 9 days (40 minute periods) Grade Level: 7-8	CTE Area: Family and Consumer Sciences CTE Theme: Problem Solving and Innovation CTE Content: Human Development and Relationships Date Created: 11/14/2018

PLANNING	
Curriculum Goal	Students will learn to identify safe and appropriate toys for children in different developmental stages. Small groups of students will design and create prototypes of toys that are safe and that are appropriate for children in various developmental stages. Students will test the prototypes with children, gather feedback, and revise designs based on the feedback.
Essential Question(s)	What knowledge and skills are necessary to demonstrate introductory understanding of the application of problem-solving processes and the acquisition, evaluation, and application of the products of research for informed decision making? How can play with safe and developmentally appropriate toys promote physical, social, emotional, and intellectual growth and development in children at various developmental stages? How can we design safe and developmentally appropriate toys for children at various developmental stages?

National Standards	Common Career Technical Core Standards
	https://www.careertech.org/career-ready-practices
	Career Ready Practices
	3. Attend to personal health and financial well-being
	4. Communicate clearly and effectively and with reason
	5. Consider environmental, social, and economic impacts of decisions
	9. Model integrity, ethical leadership, and effective management
	12. Work productively in teams while using cultural global competence
	
	National Standards for Family and Consumer Sciences Education
	http://www.nasafacs.org/
	6.0 Family
	Evaluate the significance of family and its effects on the well-being of individuals and society.
	      6.1 Analyze the effects of family as a system on individuals and society
	      6.2 Evaluate the effects of diverse perspectives, needs, and characteristics of individuals and families
	15.0 Parenting
	Evaluate the effects of parenting roles and responsibilities on strengthening the well-being of individuals and families
	      15.1 Analyze roles and responsibilities of parenting
	      15.2 Evaluate parenting practices that maximize human growth and development

NYS Standards	**New York State Career Development and Occupational Studies (CDOS) Standards**
	Intermediate Level
	Standard 1: Career Development
	Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions
	Standard 2: Integrated Learning
	Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings
	Standards 3a: Universal Foundation Skills
	Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace
	NYS Learning Standards for Family and Consumer Sciences
	Intermediate Level
	Standard 2: Safe and Healthy Environment
	Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment

Learning Objectives	Human Development and Relationships
	Human Growth and Development Across the Lifespan
	Students will
	a) Identify the stages of human growth and development across the lifespan
	b) Identify the relationships among and characteristics of the physical, emotional, social, and intellectual aspects of human growth and development
	c) Demonstrate understanding of procedures required for the care of an infant or young child
	d) Plan and implement experiences for young children which promote physical, social, emotional, and intellectual growth and development
	Design Process
	a)Students will implement a formal design process to solve a given problem by
	a Defining the problem being addressed
	b Defining criteria that must be met through the finished design
	c Defining constraints that must be adhered to
	d Brainstorming and examining possible solutions
	e Selecting the best solution for evaluation
	f. Developing and constructing a prototype or model of the selected design
	g Testing and evaluating the prototype and model against the design criteria and constraints
	i. Evaluating their use of the design process and how it impacted their final solutions

Vocabulary	Academic	Content
	Bias, stereotype, durable, toxic, prototype feedback	age-appropriate, developmentally-appropriate, fine motor skills, gross motor skills,

		cognitive/intellectual growth, social growth, emotional growth, moral growth, infant, toddler, preschooler, school-age, adolescent
Materials and Resources	Vocabulary notes presentation Toy evaluation worksheet Used toys Toy flyers Internet access 1:1 technology Toys PowerPoint (Day 1) https://docs.google.com/presentation/d/1P9ivrStn4KxNtlivxbQ9cZuFm2xSIRprGppQrLShfTw/edit?usp=sharing Toys PowerPoint Notes Sheet (Day1) https://docs.google.com/document/d/17li8v1xG20vPNkDDV_5uKRKFiLkyz5IHWm_MJQ3igGg/edit?usp=sharing Toy Evaluation Worksheet (Day 2) https://docs.google.com/document/d/15MgISdPIM3FJeH_eO20D-urKMjTU90BDt-vJnKO71DA/edit?usp=sharing Selection of Toys Background Information (Day 3) https://docs.google.com/document/d/1mnXH67HL0K5jKoBXHR1nOOsT249CosGgHbmnwXqoi-w/edit?usp=sharing How To Make Simple Toys Using Recycled Materials (Day 4-5) https://arts.onehowto.com/article/how-to-make-simple-toys-using-recycled-materials-found-at-home-252.html	
INSTRUCTION	What will the teacher do?	What will the students do?	How much time for each activity?

Pre-assessment	Day 1-
	Teacher will informally "quiz" the class to test students' knowledge of:
	• content vocabulary
	• the different abilities of children in different developmental stages
	    • Infant
	    • Toddler
	    • Preschooler
	    • School age
	    • Adolescent
	• the 5 areas of child development
	    • Cognitive
	    • Social
	    • Emotional
		Day 1-
		Students will demonstrate knowledge of the following during informal assessment:
		• content vocabulary
		• the different abilities of children in different developmental stages
		    • Infant
		    • Toddler
		    • Preschooler
		    • School age
		    • Adolescent
		• the 5 areas of child development
		    • Cognitive
		    • Social
		    • Emotional
		    • Moral
		    • Physical
		• gender stereotypes
			40min
			5min

	• Moral • Physical • gender stereotypes Teacher poses "Hook Scenario"		
Do-now/Hook	Day 1 (cont) Hook: You are shopping for a birthday present for a child. How will you know if it a toy you are considering for this child is age-appropriate and developmentally-appropriate?		

Procedure for Instruction/ Learning Activities	Day 1-
	Teacher provides students with a guided note-taking outline.
	
	Teacher shows a PowerPoint which:
	• reviews 5 developmental stages
	  ● Infant
	  ● Toddler
	  ● Preschooler
	  ● School age
	  ● Adolescent
	• reviews the 5 areas of child development
	  ● Cognitive/Intellectual
	  ● Social
	  ● Emotional
	  ● Moral
	  ● Physical
	
	Teacher discusses the definition of new content vocabulary
	
	Toys PowerPoint
	https://docs.google.com/presentation/d/1P9ivrStn4KxNtlivxbQ9cZuFm2xSIRprGppQrLShfTw/edit?usp=sharing
		Day 1:
		Students will participate in guided note taking
		  ● Review vocabulary and concepts using notes via a PowerPoint presentation.
		Toys PowerPoint Notes Sheet
		https://docs.google.com/document/d/17Ii8v1xG20vPNkDDV_5uKRKFiLkyz5IHWm_MJQ3igGg/edit?usp=sharing
			30min

	Teacher shows students examples of age-appropriate and developmentally-appropriate toys	
	Day 2- Teacher displays a variety of toys for children of varying ages/ developmental stages. Toys should be both appropriate and non-appropriate examples. Teacher reviews main points from yesterday's lesson, and discusses ways age and development may/may not coincide.	**Day 2:** Students refer to their guided note-taking and revise notes as needed.	40min 5min
	Teacher arranges the students into small groups. Teacher guides students through process of choosing age-appropriate and developmentally-appropriate toys: • Assist students in understanding safety features of toys, including toxicity and durability of toys • Review concepts of bias and stereotyping, including for gender	Students collaborate in small work groups to select age- appropriate and developmentally-appropriate toys from a set of toys set up around the classroom ● Student groups to analyze toys looking for those that have the characteristics of appropriate toys as defined in notes, and those that do not. ● Student groups choose examples to show during the summary discussion Toy Evaluation Worksheet https://docs.google.com/document/d/15MgISdPI M3FJeH_eO20D-urKMjTU90BDt-vJnKO71DA/edit?usp=sharing	25 min
	Teacher facilitates sharing by small groups.	Student groups share their examples of age-appropriate and developmentally-appropriate toys, and those that are not	10min
	Day 3- Teacher reviews main points from yesterday's activity.	**Day 3:**	40min 5min

	Teacher provides students with an online "shopping" worksheet	Students will use the information learned in the small group activity to research toys online for a designated developmental stage • Students "shop" online for a birthday present for a child in one of the 5 developmental stages.	30 min
	Teacher facilitates student sharing of their online "shopping" choices	• Students will present their shopping choices information in the form of a worksheet and by sharing in a summary discussion Selection of Toys Background Information https://docs.google.com/document/d/1mnXH67HL0K5jKoBXHR1nOOsT249CosGgHbmnwXqoi-w/edit?usp=sharing	5 min
	Day 4-5 Teacher introduces the "Prototype Toy" project. Students will design and create prototypes of safe and developmentally appropriate toys. • Toys will be durable, stage appropriate, and bias-free. • Students will choose the developmental stage they will design the toys for.	Day 4-5:	40 min x 2 days 10min
	Teacher will supply a variety of materials and supplies that students can use to make their toys. Resource and project ideas: How To Make Simple Toys Using Recycled Materials https://arts.onehowto.com/article/how-to-make-simple-toys-using-recycled-materials-found-at-home-252.html	Students will design and create prototypes of safe and developmentally appropriate toys • Students will design and create prototypes of safe toys checking for durability, age appropriateness, and stereotype free toys. • Students will choose developmental stage they would like to design the toys for .	30min 40 min (Day 5)
	Day 6 (and Day 7 depending on class size) Teacher facilitates student groups'	Day 6 (and7): Students will present their designs to the class for testing.	40minx 2 days

	presentations of their prototype toys to their classmates. Teacher will provide the audience with feedback forms. Teacher will review and organize the class comment forms prior to tomorrow's class.	• Classmates will analyze their presenters' designs for safety, durability, bias, age-appropriateness and developmental - appropriateness • Classmates will complete feedback forms following design presentations, and hand them into the teacher	
	Day 8- Teacher returns feedback forms to student groups	Day 8:	40 min
	Teacher presents a brief direct instruction lesson on the revision step in the design process.		10min
		Student groups review their feedback forms. Groups revise their toy designs based on feedback	30min
	Day 9-(optional) Teacher arranges for an authentic audience to test the prototype toys, following school district protocols.	Day 9 Students try out their toys with an authentic audience: children representing various developmental stages.	30min
	Teacher provides students with a "Ticket Out the Door" reflection: Student will answer one of the following three questions: 1. Why is it so important for children to play with age-appropriate and developmentally-appropriate toys? 2. Explain what makes toys appropriate or inappropriate for different age groups and developmental stages. 3. Are these skills that you will use	Students complete closure reflections	10min

	when you select toys for your loved ones? Why or why not?
Differentiation	The teacher can use differentiation for this lesson to meet the needs of all students in the class. Here are a some examples that are helpful: • Group students by shared interest or mixed abilities for assignment • Flyers may be used for students who have difficulty using the internet or who prefer this option • Notes can be printed for students who require this accommodation • Assignment will be broken down in small chunks to lessen frustration • Modify vocabulary words - a word bank will be provided for assistance • Students with high achievement may be given more than one age group so they can apply the concepts to children across the developmental stages of childhood • Students will physically create the toys using materials provided
Closure	Teacher will close by inviting students to use the lesson to help them select toys for loved ones . Ticket out the door: Student will answer one of the following three questions: 1. Why is it so important for children to play with age- appropriate and developmentally-appropriate toys? 2. Explain what makes toys appropriate or inappropriate for different age groups and developmental stages. 3. Are these skills that you will use when you select toys for your loved ones? Why or why not?
ASSESSMENT	
College, Career, and Life Readiness Skills	See below Based on Middle-level Life/Career Rubrics available at https://nyctecenter.org/middle-level-life-career-rubric-database/rubrics

Performance Measure	Exemplary	Proficient	Developing	Beginning
Manages Time to Complete Tasks by Deadline	Completes work ahead of schedule by creating a plan to finish early.	Completes work on time by using time management skills.	Completes work on time with reminders and supervision.	Rarely completes work on time; fails to use time management skills.
Sets and Meets Goals	Sets measurable goals and action steps to accomplish them.	Defines and meets goals using the strategies.	Defines goals and strategies but has not met goals.	Has goals but no strategies to achieve them.
Listens and Cooperates With Team Members	Consistently listens to others and their ideas; helps the team reach its full potential.	Listens to others' points of view and makes a definite effort to understand their ideas.	Sometimes listens to others, but often assumes others' ideas will not work. Tries to work well with the team.	Does not listen to groups' opinions and ideas; wants things done own way.
Shares Responsibility	Motivates members to share	Participates in and	Attempts to share	Does very little of the group's

	contributions equally by valuing all members ideas and contributions.	contributes to group's work. Values all members ideas and contributions.	responsibility of group's work, but ends up completing little of the work by disregarding the input of others.	work; does not share ideas or respect others' ideas.
Uses Technology to Locate and Evaluate Information	Effectively and consistently uses multiple technology tools to collect, organize, evaluate, and/or communicate information.	Uses technology effectively as a tool to collect, organize, evaluate, and/or communicate information.	Uses popular technology tools to collect and/or communicate information.	Attempts to use technology to collect and/or communicate information are ineffective.
Analyzes Critical Information	Thoroughly evaluates the reliability of the source and the information researched using internal and external validation.	Thoroughly evaluates information researched using internal and external validation.	Evaluates information researched but not thoroughly.	Does not evaluate information.
Demonstrates Originality and Inventiveness	Consistently demonstrates creativity in new situations.	Demonstrates creativity in many new situations.	Demonstrates creativity but does not always understand how to express it.	Does not demonstrate creativity.
Maintains Focus to Completion of the Project	Stays focused consistently, prioritizes tasks, recognizes time constraints of projects, and avoids distractions while meeting deadlines.	Develops a timeline for the work to be completed and stays focused throughout the project.	Is occasionally off task in regards to accomplishing the project, thus only a portion of it is completed.	Is often off task and does not complete the project.
Allocates Resources to Meet Needs	Consistently plans in advance how much stock can and should be used to complete a project promptly (e.g., portioning meals, making a budget, having correct quantity and type of materials onsite).	Correctly figures how much stock can and should be used to complete a project promptly (e.g., portioning meals, making a budget, having correct quantity and type of materials onsite).	Often guesses how much stock should be used to complete a project (e.g., portioning meals, making a budget, having correct quantity and type of materials onsite).	Does not understand how much stock can and should be used to complete a project (e.g., portioning meals, making a budget, having correct quantity and type of materials onsite).