

Unit Title	Introduction to Technology Education
Time Frame	4 classes
21st Century Themes	Nature of Technology: Creativity and Innovation
Interdisciplinary Focus	Language Arts

Big Idea

Technology products and systems impact every aspect of the world in which we live. The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.

Essential Questions

What is technology?
How technology is used every day?
What are advantages of technology?
What are disadvantages of technology?

Learning Targets- SWBAT:

Identify the characteristics and scope of technology.

Content Standards

8.2.2.A.1
8.1.2.B.1

Differentiation

- Process (Reading, writing, listening, discussing)
- Product (Speech, portfolio, essay, project, test, group work)
- Content (Assign/evaluate different skills)
- Interest (provide a choice of activities)
- Readiness (Assess for prior knowledge)
- Modality (Satisfy the multiple intelligences)

Learning Experiences

Good technology
Poster de technology
Terminology
Basic computer functions

Assessments

- Electronic journals
- Oral tests
- Oral participation
- Computerized tests
- Individual/group performance

Resources

PowerPoint, Word, poster board, crayons, computer work stations

Unit Title	Curious Creations
Time Frame	4 classes
21st Century Themes	Designed World: Critical Thinking, Problem Solving, and Decision-Making
Interdisciplinary Focus	Science, Engineering and Design

Big Idea

The designed world is the product of a design process that provides the means to convert resources into products and systems. The design process is a systematic approach to solving problems. The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.

Essential Questions

What is a compass rose?
 What shapes do you see grocery shopping?
 What shapes can you find around your home?
 How do I hand in my work?

Learning Targets- SWBAT:

Identify and apply attributes of the design process.

Content Standards

8.2.2.G.1-2
 8.2.2.B.1-2
 8.1.2.A.1-5

Differentiation

- Process (Reading, writing, listening, discussing)
- Product (Speech, portfolio, essay, project, test, group work)
- Content (Assign/evaluate different skills)
- Interest (provide a choice of activities)
- Readiness (Assess for prior knowledge)
- Modality (Satisfy the multiple intelligences)

Learning Experiences

Compass directions
 Shapes and sizes
 Build paper houses
 Organize personal booklet

Assessments

- Electronic journals
- Oral tests
- Oral participation
- Computerized tests
- Individual/group performance

Resources

Word, computer work stations, worksheets, glue, scissors, staples, crayons

Unit Title	Community
Time Frame	5 classes
21st Century Themes	Citizenship: Technological Smarts, Ethics, and Society
Interdisciplinary Focus	Science, Visual and Performing Arts

Big Idea

Knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society. Technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors.

Essential Questions

Can you explain your story?
How did you involve your school, country, and community?
Why is safety in technology important?
How did your project impact children in a positive way?

Learning Targets- SWBAT:

Identify and illustrate the social effects of technology in our community.

Content Standards

8.1.2.E.1
8.2.2.C.1
8.1.2.D.1

Differentiation

- Process (Reading, writing, listening, discussing)
- Product (Speech, portfolio, essay, project, test, group work)
- Content (Assign/evaluate different skills)
- Interest (provide a choice of activities)
- Readiness (Assess for prior knowledge)
- Modality (Satisfy the multiple intelligences)

Learning Experiences

Illustrate a story
Roar of the crowd
Safety in technology
Lets help children

Assessments

- Electronic journals
- Oral tests
- Oral participation
- Computerized tests
- Individual/group performance

Resources

Word, Paint, internet, online quiz, story activity sheet

Unit Title	Educational Gaming
Time Frame	5 classes
21st Century Themes	Green Systems: Research and Information Fluency
Interdisciplinary Focus	Mathematics, Comprehensive Health & Physical Education

Big Idea

Information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems. Effective use of digital tools assists in gathering and managing information. Technological products and systems are created through the application and appropriate use of technological resources.

Essential Questions

How does technology impact society daily?
What needs to be fixed?
What could you fix?
What steps did you take?

Learning Targets- SWBAT

Summarize cultural and economic uses of technology.

Content Standards

8.2.2.D.1
8.1.2.E.1
8.2.2.F.1

Learning Experiences

Creativity and innovation
Critical thinking
Decision making
A technological society

Differentiation

- Process (Reading, writing, listening, discussing)
- Product (Speech, portfolio, essay, project, test, group work)
- Content (Assign/evaluate different skills)
- Interest (provide a choice of activities)
- Readiness (Assess for prior knowledge)
- Modality (Satisfy the multiple intelligences)

Assessments

- Electronic journals
- Oral tests
- Oral participation
- Computerized tests
- Individual/group performance

Resources

Word, computer, internet

Unit Title	Mega Block Building
Time Frame	5 classes
21st Century Themes	Culture: Communication and Collaboration
Interdisciplinary Focus	Social Studies and Global Languages

Big Idea

Digital tools facilitate local and global communication and collaboration in designing products and systems. Digital environments support the learning process and foster collaboration in solving local or global issues and problems.

Essential Questions

Describe the basis of your design.
Were you able to agree during the design process?
Were you happy with the final outcome of you design?
Explain your design to the class in detail.

Learning Targets- SWBAT:

Identify the role of society in using technology.

Content Standards

8.2.2.E.1
8.1.2.C.1

Differentiation

- Process (Reading, writing, listening, discussing)
- Product (Speech, portfolio, project, test, group work)
- Content (Assign/evaluate different skills)
- Interest (provide a choice of activities)
- Readiness (Assess for prior knowledge)
- Modality (Satisfy the multiple intelligences)

Learning Experiences

Research design
Collaboration
Adding resources
Share design

Assessments

- Electronic journals
- Oral tests
- Oral participation
- Computerized tests
- Individual/group performance

Resources

story challenges, computer work stations, kid blocks, megablocks