



# TECHNOLOGY

Technology is the study of the application of knowledge, creativity, and resources to solve problems and extend human potential.



# The Development of Human Society

- ◆ Hunting Society
- ◆ Agricultural Society
- ◆ Industrial Society
- ◆ Information Society



# MAJOR TRANSFORMATIONS IN SOCIETY AND TECHNOLOGY EDUCATION

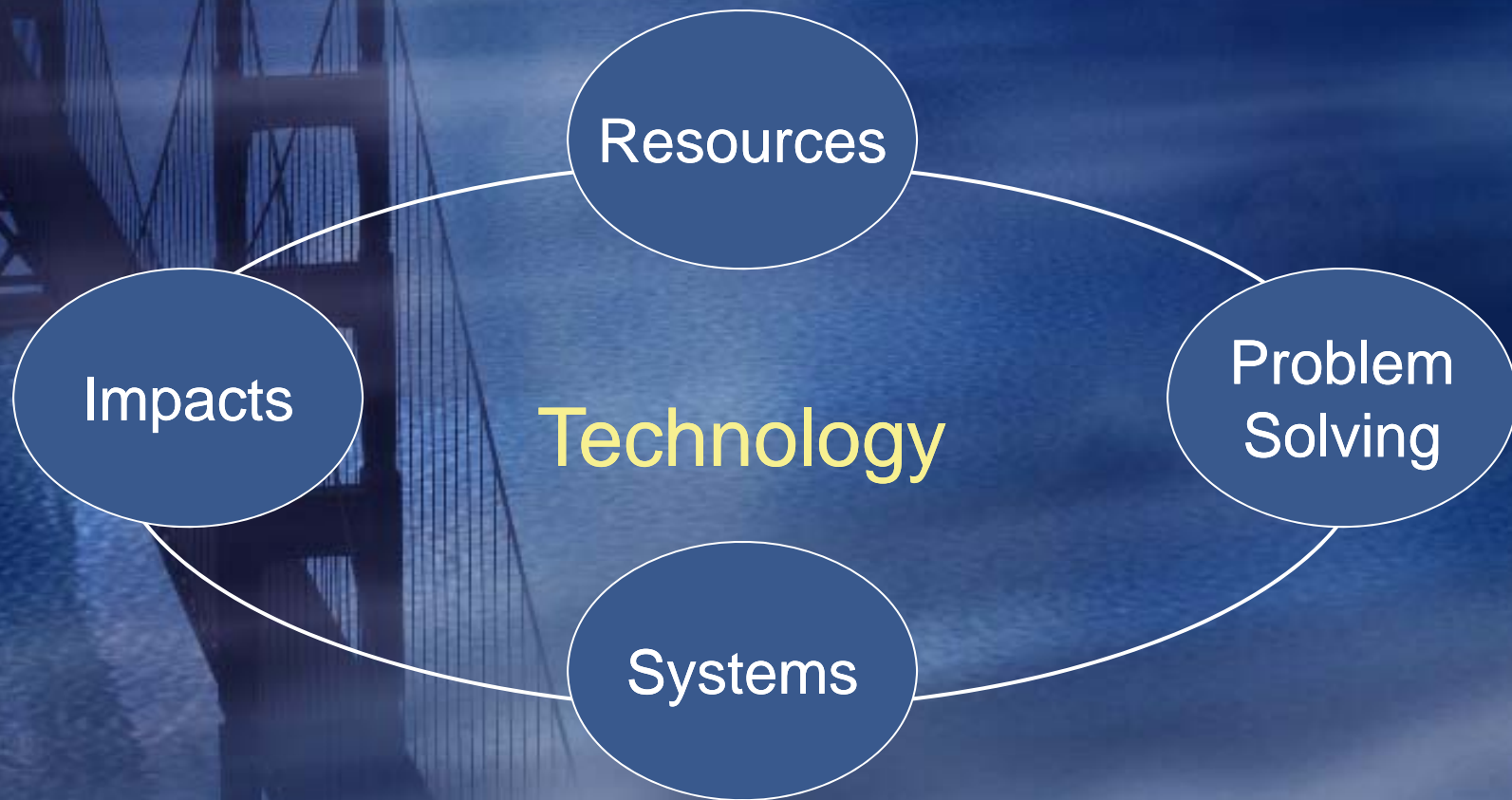
- ◆ Sociocultural Evolution

- ◆ Agriculture Age
- ◆ Industrial Age
- ◆ Information Age

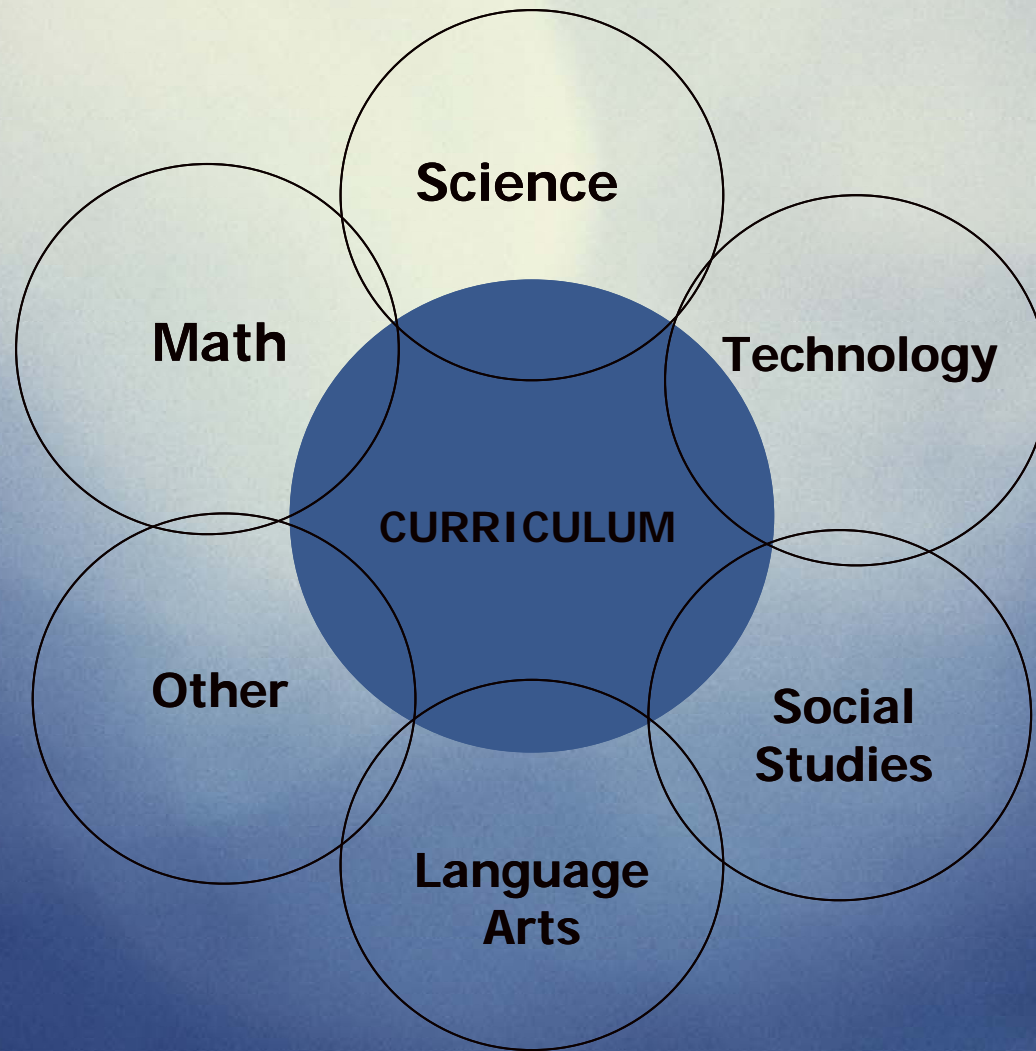
- ◆ Technology Education Evolution

- ◆ Arts and Crafts Era
- ◆ Industry and Technology Era
- ◆ Technology and Engineering Era

# RECURRING TECHNOLOGICAL COMPONENTS



# ELEMENTARY SCHOOL TECHNOLOGY EDUCATION CURRICULUM MODEL



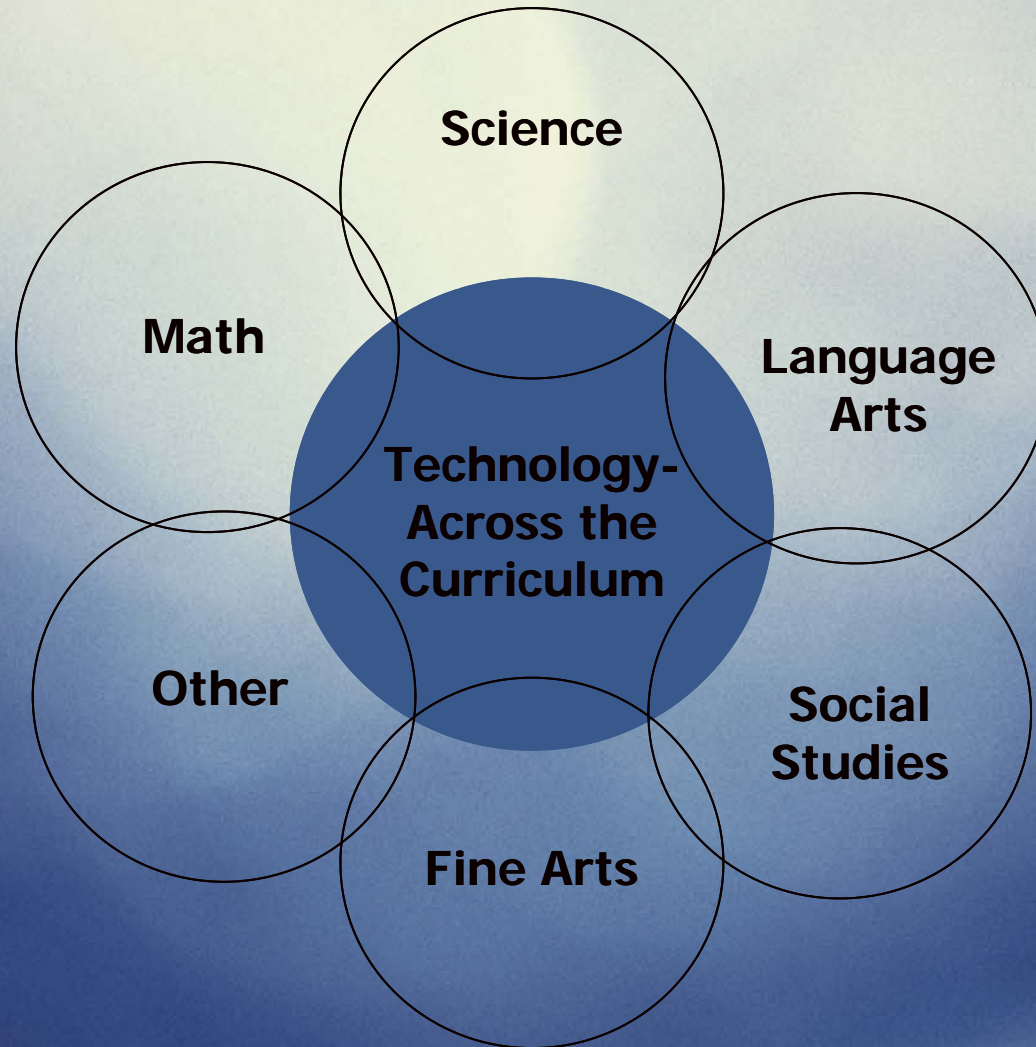


## ELEMENTARY SCHOOL TECHNOLOGY EDUCATION CURRICULUM MODEL

- ◆ Explore how people create, use, and control technology.
- ◆ Apply knowledge in mathematics, language arts, social studies, science, health, and fine arts in solving problems associated with technology.
- ◆ Use tools and materials to explore personal interests with technology.
- ◆ Exhibit self-confidence through the use of technology.

# TECHNOLOGY EDUCATION IN EARLY CHILDHOOD EDUCATION

Focus: Technological Awareness and Learning Reinforcement



A photograph of the Golden Gate Bridge at night, illuminated with blue lights. The bridge's towers and suspension cables are visible against a dark blue sky and water. The text "EXPLORATIONS IN TECHNOLOGY" is overlaid in yellow on the right side of the image.

# EXPLORATIONS IN TECHNOLOGY

# TECHNOLOGICAL EMPHASIS AT EACH LEVEL OF MIDDLE SCHOOL

Introduction to Technology

Inventions & Innovations

Resources

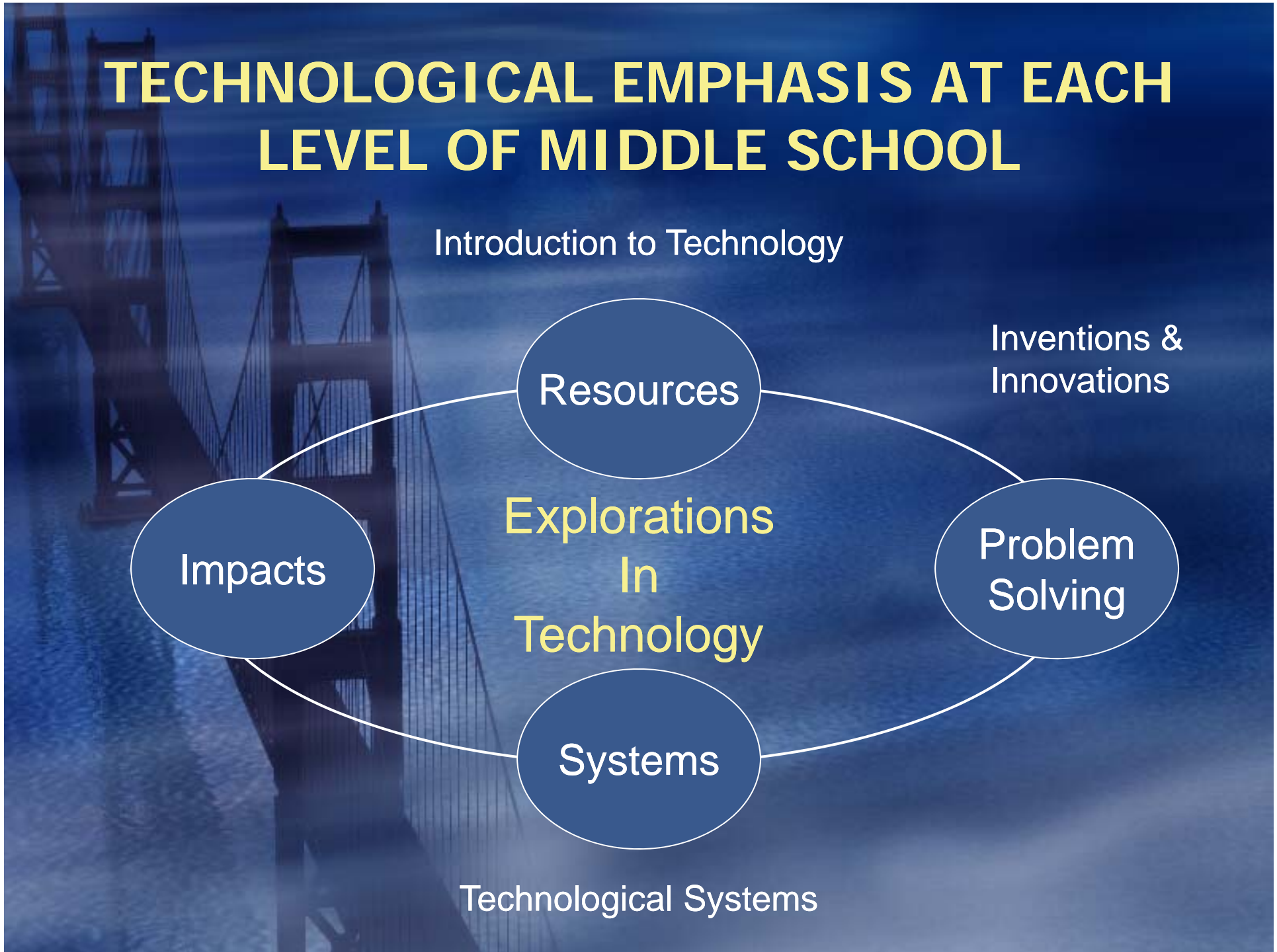
Explorations  
In  
Technology

Problem  
Solving

Impacts

Systems

Technological Systems

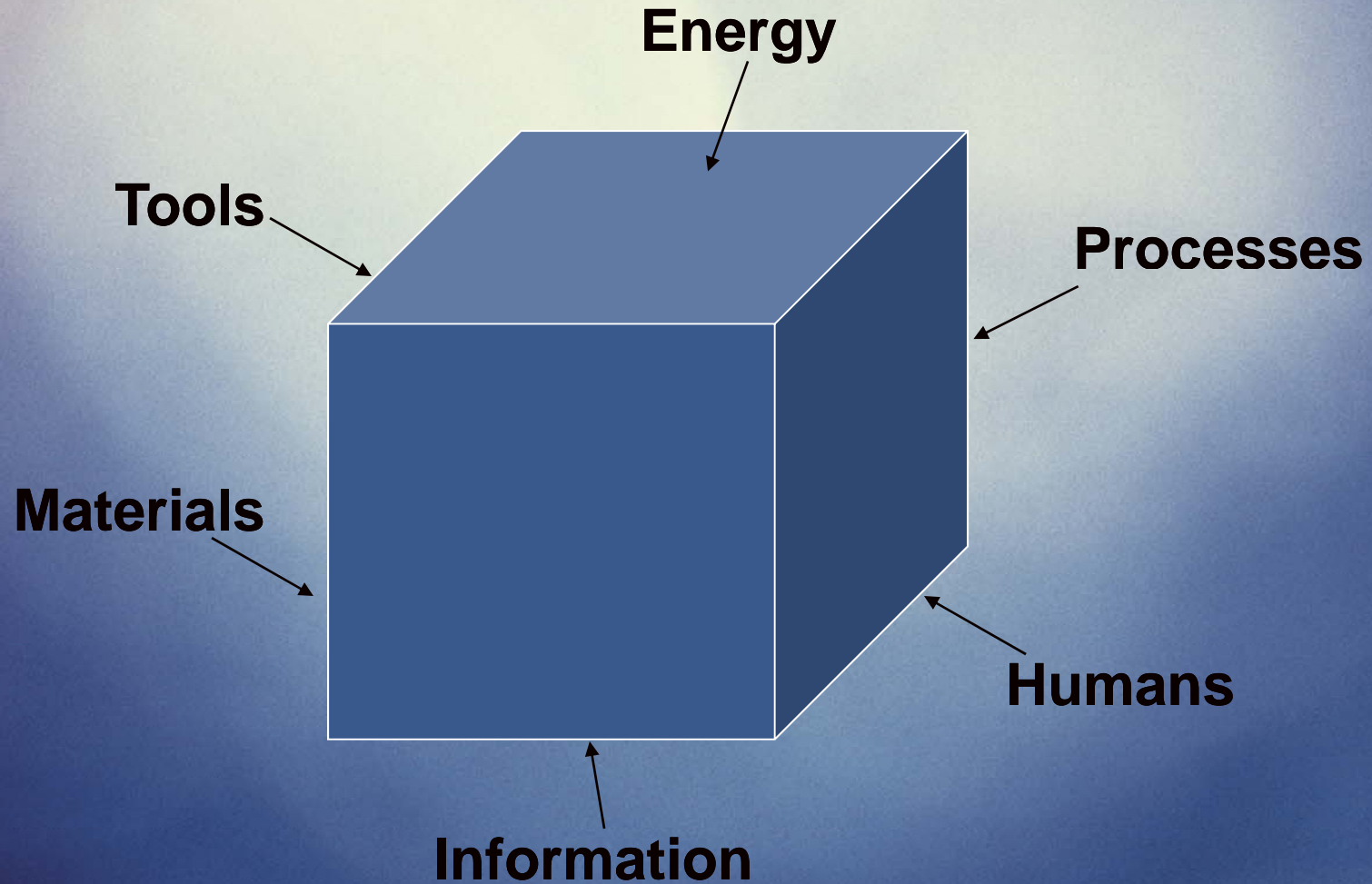


A photograph of the Golden Gate Bridge at night, illuminated with blue lights. The bridge's towers and suspension cables are visible against a dark blue sky and water. The text "INTRODUCTION TO TECHNOLOGY" is overlaid in yellow on the right side of the image.

# INTRODUCTION TO TECHNOLOGY

# RESOURCES

Elements of all technological activities:



A photograph of the Golden Gate Bridge at night, illuminated by city lights, with the text 'INVENTIONS AND INNOVATIONS' overlaid in yellow. The bridge's towers and suspension cables are visible against a dark blue sky and water.

# INVENTIONS AND INNOVATIONS

A photograph of the Golden Gate Bridge at night, illuminated against a dark blue sky and water. The bridge's towers and suspension cables are visible, creating a strong geometric pattern.


# CREATING

- ◆ Brainstorming
- ◆ Sketching
- ◆ Model Building

# PROBLEM SOLVING



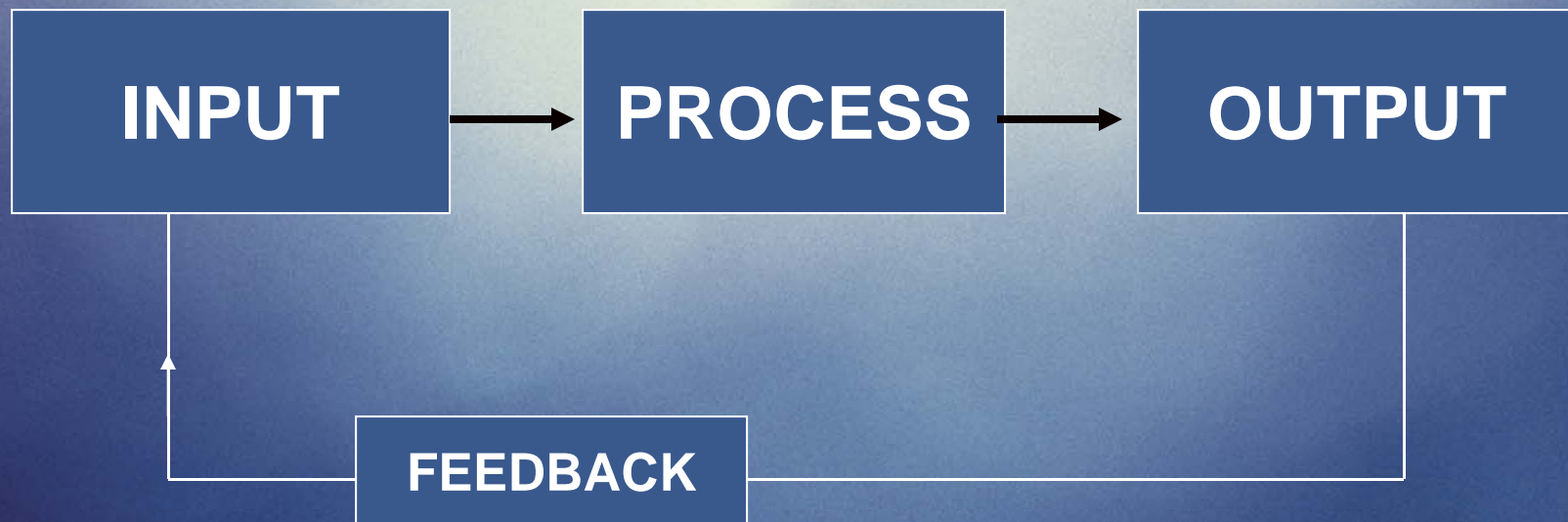
- ◆ The Inherent Process of Technology:
  - ◆ I - Identify the problem
  - ◆ D - Define the goal
  - ◆ E - Explore possible solutions
  - ◆ A - Assess alternatives for best solutions
  - ◆ T - Take action on solution
  - ◆ E - Evaluate results with goal

A photograph of the Golden Gate Bridge at night, illuminated with blue lights. The bridge's towers and suspension cables are visible against a dark blue sky and water. The text "TECHNOLOGICAL SYSTEMS" is overlaid in yellow on the right side of the image.

# TECHNOLOGICAL SYSTEMS

# SYSTEMS

A combination of resources and techniques working together to produce a desired result



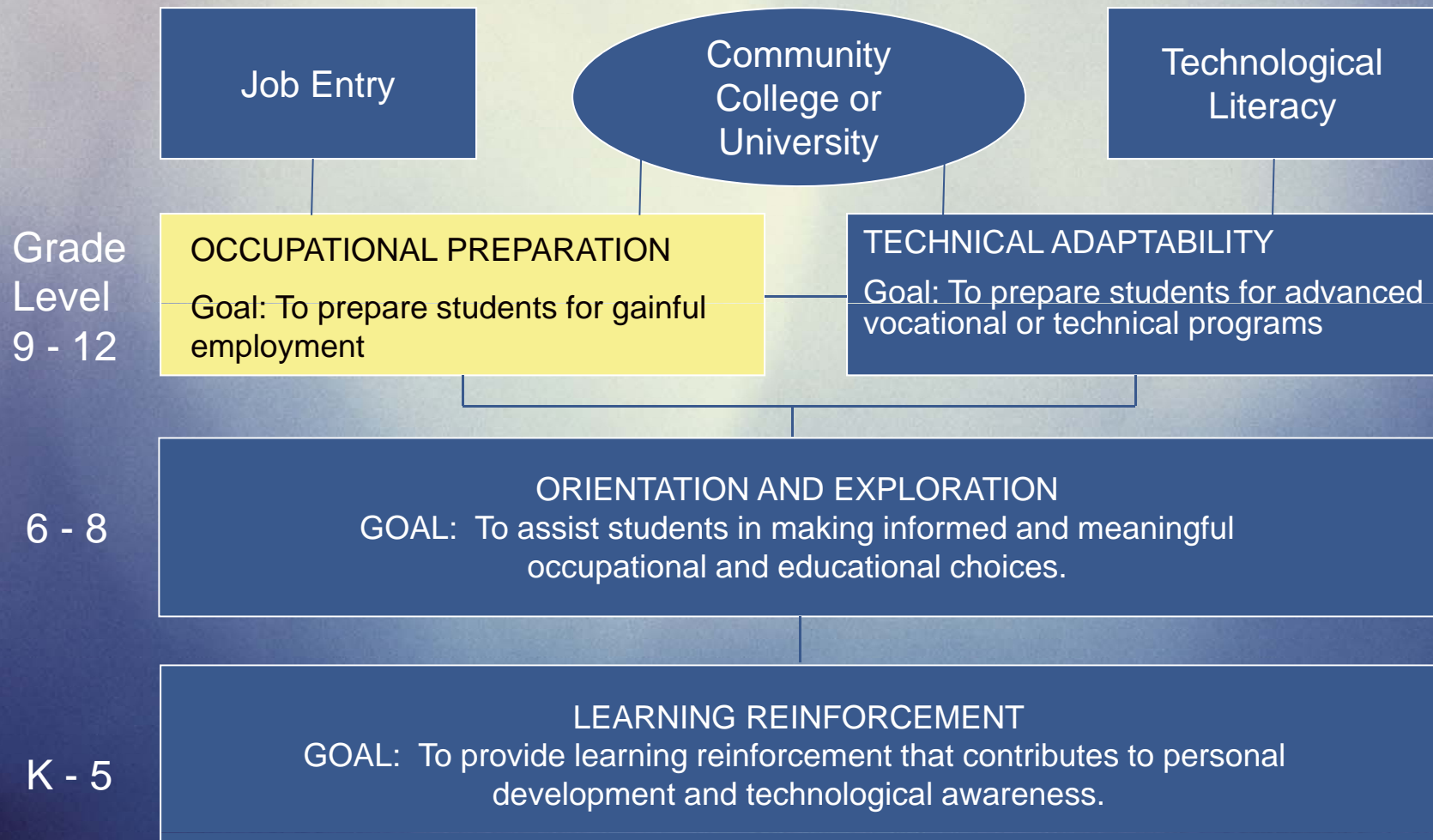


# IMPACTS

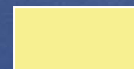
- ◆ Economic, environment and social consequences of technological endeavors:
  - ◆ Planned
  - ◆ Desired
  - ◆ Undesired
  - ◆ Unplanned

# TECHNOLOGY EDUCATION

## Articulation Model



Technology



Occupational Education

# VIRGINIA TECHNOLOGY EDUCATION PROGRAM

## Middle School

Introduction  
To  
Technology

Inventions  
And  
Innovations

Technological  
Systems

Technology  
Foundations

## High School

Technology  
Transfer

Technology  
Assessment

Communication

Production

Design and  
Illustration

Pre-Engineering

Control

Principles of  
Technology



# Questions and Answers

## Career and Technical Education

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