This section provides teachers with an organizational tool that connects the Career Development and Occupational Studies Learning (CDOS) Standard 3b with corresponding performance indicators. The goal of this core curriculum is to provide a user-friendly guide that links CDOS with other content areas and provides educators with a framework for lesson plan development.

### Standard 3b: Career Clusters

Students who choose a career cluster will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

### 1. Ethical/Legal Responsibilities

**Performance Indicator:** Students demonstrate professional, ethical, and legal responsibilities toward customers.

**Students will:**

A. Identify and understand workplace laws, regulations, and policies:
   1. Federal agencies (e.g., OSHA, FDA, EPA)
   2. HAZMAT (handling, storing, and transporting of hazardous materials)
   3. Licensing certification requirements
   4. Industry standards (e.g., American Dietetics Association, National Restaurant Association)
   5. Fair Labor Standards Act
   6. Violations/infractions of federal, state, and local laws
   7. Fully accessible environments and designs in compliance with the Americans with Disabilities Act
   8. Insurance and financial obligations
   9. Company policies

B. Identify and understand consumer protection regulations, laws, and policies:
   1. Federal, state, and local safety codes
   2. Agriculture and Markets laws
   3. General business law
   4. Food label laws
   5. Clothing label laws
   6. Appliance label laws
   7. FDA product safety regulations
   8. Family law (e.g., health care proxy, custody)
   9. Consumer advocacy agencies (e.g., Consumer Product Safety Commission, Attorney General’s Office)

**Discussion Questions**

- What criteria can be used to guide professional behaviors?
- What happens if we disregard laws, regulations, and policies in the workplace?
C. Understand ethics as applied to:
   1. Client and coworker confidentiality
   2. Child protective services
   3. Appreciation of diversity
   4. Codes of conduct

2. Communications

Performance Indicator: Students demonstrate effective communication skills needed to meet the expectations of human and public services consumers.

   will:
A. Understand techniques of effective communication:
   1. Speaking
      a. Acceptable conventions of the English language
      b. Grammar, tone
      c. Presentation skills
      d. Questioning skills
      e. Interviewing
   2. Reading
      a. Directions
      b. Comprehension
      c. Interpreting data
   3. Listening
      a. Comprehension
      b. Feedback
   4. Writing
      a. Reports, records, forms
      b. Directions
      c. Grammar
   5. Non-verbal communication
      a. Appearance
      b. Body language
      c. Attitudes
   6. Public relations/promotion

B. Understand and apply communication processes to convey information:
   1. Records, forms, applications, resumes, reports
   2. Alternative communication techniques (e.g., ASL, technology)
   3. Constructive/destructive communication techniques
   4. Nonverbal communication
   5. Public relations, advertising, and promotion

C. Identify barriers to effective communication:
   1. Destructive communication techniques
      a. Blocked communication
      b. Mixed messages
      c. “You” messages
   2. Lack of ethical communication

D. Convey information through:
   1. Telephone contact with clients and coworkers
   2. Internet/intranet
      a. Purchasing supplies
      b. Contact with customers and vendors
      c. Gathering information
   3. Word processing
      a. Correspondence

Discussion Questions

• What are the results of effective and ineffective communication skills in the workplace?
• How does information technology support the needs of workers and clients in Human and Public Services systems?
3. Sanitation

**Performance Indicator:** Students demonstrate knowledge of the principles of sanitation used to prevent the transmission of disease-producing microorganisms from one person/object to another.

**Students will:**
A. Understand personal/employee habits and activities related to:
   1. Hygiene/body defenses
   2. Immunization/immunity
   3. Infection and disease control
   4. Universal precautions
B. Identify environmental factors related to sanitation:
   1. Bacteriology/diseases and disorders
   2. Chemical and physical agents
   3. Storage of materials, supplies, equipment
   4. Cleaning, sanitizing, disinfecting home and work areas

**Discussion Questions**
- What are the benefits of following sanitation, decontamination, and infection control practices?
- What actions would the worker take to ensure sanitation, decontamination, and infection control procedures are being followed?

4. Human Growth and Development

**Performance Indicator:** Students understand the process of human growth and development and its influence on client needs.

**Students will:**
A. Understand the individual’s:
   1. Life cycle stages (prenatal through elderly years)
   2. Physical development
   3. Intellectual development
   4. Social and emotional development
   5. Formation of self-esteem, -concept, -image
   6. Human sexuality
   7. Special needs
B. Understand concepts related to families:
   1. Family composition
   2. Family dynamics
   3. Parenting styles
   4. Individual and family member roles
   5. Individual and family goals
   6. Individual and family value systems
   7. Family crises and stress factors

**Discussion Questions**
- What individual and family factors affect human growth and development across the life span?
- How does an individual’s growth and development affect behavior and interaction in the workplace?
5. Interpersonal Dynamics

**Performance Indicator:** Students demonstrate how to interact effectively and sensitively with others.

Students will:

A. Understand characteristics and selected aspects of relationships:
   1. Group dynamics
   2. Independence/interdependence
   3. Interrelationship of life roles
   4. Conflict resolution
   5. Tolerance toward other individuals and groups
   6. Effects of change
   7. Crisis management
   8. Employee relations
   9. Customer relations
   10. Human resource specialists

B. Understand leadership as related to:
   1. Personal development
   2. Initiative and responsibility
   3. Cooperative work techniques
   4. Contributions of individual to group efforts
   5. Organizational structures
   6. Youth leadership organizations

C. Identify community resources:
   1. Agencies (e.g., United Way, Chamber of Commerce)
   2. Support systems/networks
   3. Professional organizations
   4. Individuals (e.g., mentors, community leaders)

**Discussion Questions**

- What are the characteristics of a healthy human relationship?
- What are the consequences of negative human relationships on work productivity?

6. Safety

**Performance Indicator:** Students provide safe environments for others.

Students will:

A. Understand individual responsibility:
   1. Use and care manuals
   2. General and specific safety rules
   3. Accident/injury prevention
   4. Emergency procedures

B. Understand workplace responsibilities:
   1. Adaptive modification compliance
   2. Selection criteria for tools, equipment, appliances, and furnishings
   3. Regular assessment of tools, equipment, appliances, furnishings, and physical conditions
   4. Emergency management
   5. Fire prevention

**Discussion Questions**

- What are the characteristics of a safe work environment?
7. Thinking/Problem Solving

**Performance Indicator:** Students solve problems, set goals, and make decisions in order to provide services to best meet the needs of others.

**Students will:**
A. Understand and practice goal setting:
   1. Setting priorities
   2. Conducting needs assessment
   3. Identifying resources
   4. Adjusting to change
   5. Evaluating progress

B. Apply process skills:
   1. Critical thinking
   2. Creative thinking
   3. Decision making
   4. Problem solving
   5. Evaluating

8. Personal Resource Management

**Performance Indicator:** Students apply personal and resource management skills.

**Students will:**
A. Understand and practice personal management:
   1. Aptitudes and skills
   2. Career plan
   3. Time allocation: work, family, leisure, and personal
   4. Role models, mentors, and networks
   5. Lifelong learning/continuing education

B. Understand and practice resource management:
   1. Time
   2. Work spaces
   3. Human resources
   4. Technology
   5. Finances
   6. Work attire and equipment
   7. Conservation of energy, supplies, and materials

C. Understand and practice balancing work and family roles:
   1. Work and family schedule
   2. Physical and emotional demands
   3. Family and social demands
   4. Travel requirements
   5. Climate of the workplace (e.g., “family-friendly”)

**Discussion Questions**

- What processes do we need to know and be able to use to succeed in the workplace?

- How do workplace and personal issues impact how we manage our resources?

- What are the benefits of choosing a career plan that reflects family, learning, leisure, and community goals?
Performance Indicator: Students exhibit and promote a positive image of wellness.

Students will:
A. Understand body systems’ roles in ensuring wellness.
B. Understand facts and concepts of nutrition:
   1. Nutrients and food sources
   2. Role of food in the body
   3. Dietary guidelines/food pyramid
   4. Food-borne illnesses
   5. Global food issues
   6. Government programs related to nutrition
   7. Therapeutic diets
   8. Special dietary needs
C. Understand facts and concepts of fitness:
   1. Work-specific fitness
   2. Lifetime fitness
   3. Leisure activities/lifetime sports
   4. Weight management
D. Understand facts and concepts of mental/emotional health:
   1. Job satisfaction
   2. Personal wellness plan
   3. Stress/crisis management
   4. Anger management
   5. Aging process
   6. Eating disorders
   7. Healthy lifestyle

Discussion Questions

• What processes do we need to know and be able to use to succeed in the workplace?
Sample Activities
Standard 3b
Career Clusters—
Human and Public Services
# Career Clusters—Human and Public Services

## Sample Activities Overview

<table>
<thead>
<tr>
<th>Sample Activities</th>
<th>Page</th>
<th>CDOS and Possible Connecting Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discontent</td>
<td>280</td>
<td>CDOS; ELA; MST; SS; H/PE/FCS</td>
</tr>
<tr>
<td>Teens Across the Eras</td>
<td>281</td>
<td>CDOS; ELA; MST; SS; H/PE/FCS</td>
</tr>
<tr>
<td>Teacher Attitudes</td>
<td>282</td>
<td>CDOS; ELA; SS; H/PE/FCS</td>
</tr>
<tr>
<td>Bacteria in the Workplace</td>
<td>283</td>
<td>CDOS; ELA; MST; H/PE/FCS</td>
</tr>
<tr>
<td>Careers for a Lifestyle</td>
<td>284</td>
<td>CDOS; ELA; MST; H/PE/FCS</td>
</tr>
<tr>
<td>Crisis Management on the Job</td>
<td>285</td>
<td>CDOS; ELA; MST; SS; H/PE/FCS</td>
</tr>
<tr>
<td>Success of a Business</td>
<td>286</td>
<td>CDOS; ELA; MST; H/PE/FCS</td>
</tr>
</tbody>
</table>

**Possible Connecting Standards**

- **ELA** = English Language Arts Standards
- **LOTE** = Languages Other than English Standards
- **MST** = Mathematics, Science, and Technology Standards
- **H/PE/FCS** = Health, Physical Education, Family and Consumer Sciences Standards
- **SS** = Social Studies Standards
- **Arts** = The Arts Standards
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Human and Public Services

Title of Activity: Consumer Discontent

Estimated Time: 1–2 class periods

| GRADE | 9 | 10 | 11 | 12 |

OBJECTIVE(S)
Students identify causes of consumer discontent (both product design- and service-related) and recommend solutions.

DESCRIPTION OF ACTIVITY
• Working in groups of two or three, students brainstorm and discuss a list of products or services they have purchased or used that have not met their expectations.
• They select a product or service and describe their expectations of it, as well as the reasons they felt their expectations were not met. If appropriate, they research the design of the product to determine if design flaws led to the problems with the product. They answer the following questions:
  - What quality assurances were made by the maker/provider of the product or service?
  - Were consumer expectations reasonable/valid?
• Each student writes a business letter of complaint incorporating the findings of their research, including an expected resolution of the problem.
• Next, each group chooses a specific product or service and identifies and compiles a list of standards appropriate to that product or service. They should research and identify regulations and laws as well as agencies that protect consumers.

MATERIALS/RESOURCES
• Access to research materials

COMMENTS/MODIFICATIONS

POSSIBLE STANDARDS CONNECTIONS

SOURCE/CREDIT
CDOS Writing Team.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Human and Public Services

Title of Activity: Teens Across the Eras

| GRADE | 9 | 10 | 11 | 12 |

Estimated Time: 1 week

OBJECTIVE(S)
Students understand the psychological, biological, and sociological influences on teenage development.

DESCRIPTION OF ACTIVITY
- Students work in groups of three to research changes in the lifestyle, health, and attitudes of teenagers across multiple decades and then explain how those periods of history influence how a person ages.
  - For example:
    - If I am a recent college graduate, how did my teenage era influence how I live today?
    - If I am a baby boomer (45-60 years old), how did my teenage era influence how I live today?
    - If I am 70+, how did my teenage era influence how I live today?
  - Each group gives an oral presentation that includes examples of the psychology, biology, and sociology of the various generations studied. Individually, students prepare a written report focusing on two or more of the following influences:
    - Health
    - Public policy
    - Finances
    - Retirement
    - Food and nutrition
    - Housing
    - Culture
    - Family and friends
    - Sexuality
    - Environmental issues
    - Careers
    - History
    - Clothing
    - Education
    - Leisure
    - Values

MATERIALS/RESOURCES
- Access to research materials

COMMENTS/MODIFICATIONS
- Students may incorporate information derived from oral histories (related by relatives, friends, neighbors, etc.).

SOURCE/CREDIT
CDOS Writing Team.

COMMENCEMENT STANDARDS

Human and Public Services (3b)
1. Ethical/Legal Responsibilities
2. Communication
3. Sanitation
4. Human Growth and Development
5. Interpersonal Dynamics
6. Safety
7. Thinking/Problem Solving
8. Personal Resource Management
9. Wellness

Career Development (1)
1. Complete development of career plan
2. Apply decision-making skills in selection of a career option
3. Analyze skills and abilities in a career option

Integrated Learning (2)
1. Demonstrate integration and application
2. Use academic knowledge and skills
3. Research, interpret, analyze, and evaluate information

Universal Foundation Skills (3a)
1. Basic Skills
2. Thinking Skills
3. Personal Qualities
4. Interpersonal Skills
5. Technology
6. Managing Information
7. Managing Resources
8. Systems

POSSIBLE STANDARDS CONNECTIONS

English Language Arts
Languages Other than English
Mathematics, Science, and Technology
Health, Physical Education, and Family and Consumer Sciences
Social Studies
The Arts
### COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

**Human and Public Services**

**Title of Activity:** Teacher Attitudes

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

**Estimated Time:** 2–3 weeks

#### OBJECTIVE(S)

Students identify and report on the changes in job requirements and satisfaction for teachers.

#### DESCRIPTION OF ACTIVITY

- This activity will involve students in developing a questionnaire to survey and interview teachers with various levels and types of experience in their careers. Students should organize their findings according to changes in licensing requirements, educational system changes and reforms, and economic, political, and sociological changes. Through analysis of the data gathered, students will determine the level of career satisfaction teachers have experienced, how educational change and reform have impacted teachers over a period of time, and the vision teachers have for the future of education and teaching. Using appropriate technology, students will analyze and report the results of their study, including tables and graphs summarizing trends across time.

#### MATERIALS/RESOURCES

- Access to computers with graphic software

#### COMMENTS/MODIFICATIONS

- Other professions in the human and public services career cluster can also be the focus of the investigation.

#### SOURCE/CREDIT

CDOS Writing Team.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Human and Public Services

Title of Activity: Bacteria in the Workplace

| GRADE | 9 | 10 | 11 | 12 |

Estimated Time: 2–3 weeks

OBJECTIVE(S)
Students understand factors that control bacterial growth and analyze various factors in workplace settings.

DESCRIPTION OF ACTIVITY
- Students study bacterial growth on surfaces in the workplace (include refrigerators if in a food lab).
- Students take smears of various workstations (counters, doorknobs, telephones, chairs, etc.).
- Teacher provides guide sheet for recognizing bacterial growths.
- Using three readings (24 hours, 48 hours, 72 hours) students analyze growth under the microscope, identifying type of bacteria and recording findings.
- Students research the best decontamination and infection controls to use for the particular type of organism found.
- Students make product selections in compliance with OSHA regulations and right-to-know laws. This will include storage and application.
- Students analyze proper use of products on the basis of other uses of surface areas (e.g., food preparation).
- Students complete a final written report summarizing their findings for the various components of this project.

MATERIALS/RESOURCES
- Activity guide sheets
- Microscopes and specimen slides
- Copies of OSHA regulations

COMMENTS/MODIFICATIONS

POSSIBLE STANDARDS CONNECTIONS

SOURCE/CREDIT
CDOS Writing Team.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Human and Public Services

Title of Activity: Careers for a Lifestyle

GRADE

| 9 | 10 | 11 | 12 |

Estimated Time: 1 week

OBJECTIVE(S)
Students evaluate a variety of employment options to decide which best meets their individual needs/goals/lifestyles.

DESCRIPTION OF ACTIVITY
- Students collect, compare, and evaluate data including benefited salary/wage schedules for a variety of employment options within one human and public services area. Students decide which employment option best meets their individual needs/goals/lifestyles.
- Given data on various employment options in a certain human and public services area, students create a chart to compare these options. For example, students receive information on four different salon organizations. Data for each salon might include salary, commissions, working hours, costs for educational/training requirements, benefit packages, salon atmosphere, costs for supplies, etc. Charts should be constructed using appropriate computer technology.
- Based on the charts, students evaluate:
  ❍ Weekly pay, including salary, commission, gratuities
  ❍ Costs/benefits of training/retraining/continuing education
  ❍ Possible additional remuneration that may be provided in the form of benefits. For example, how much would it cost if the worker had to pay for health insurance?
  ❍ Possible additional costs
- Students select the employment option that best suits their individual needs/goals/lifestyles and prepare a written justification describing how/why this option is best.

MATERIALS/RESOURCES
- Appropriate computer software

COMMENTS/MODIFICATIONS

POSSIBLE STANDARDS CONNECTIONS

English Language Arts
Languages Other than English
Mathematics, Science, and Technology
Health, Physical Education, and Family and Consumer Sciences
Social Studies
The Arts

SOURCE/CREDIT
CDOS Writing Team.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Human and Public Services

Title of Activity: Crisis Management on the Job

GRADES

| 9 | 10 | 11 | 12 |

Estimated Time: four 50-minute class periods

OBJECTIVE(S)
Students understand the importance of crisis management in the human and public services workplace.

DESCRIPTION OF ACTIVITY
In order to demonstrate the importance of crisis management in the workplace and specific steps to apply to crisis situations, students perform the following activities:

• Identify members of a crisis management team.
• Describe the generic roles of members of a crisis management team.
• Detail the specific roles of members of a crisis management team in the context of a specific crisis.
• Describe crisis situations that may occur in the workplace, such as:
  ❍ Robbery of a restaurant
  ❍ Client having a seizure attack at a salon
  ❍ Weather emergency at a nursing home
  ❍ Intruder in a child care center
• Produce a crisis management manual for crisis situations in the workplace.

MATERIALS/RESOURCES
• Computer hardware and software

COMMENTS/MODIFICATIONS

POSSIBLE STANDARDS CONNECTIONS

SOURCE/CREDIT
CDOS Writing Team.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Human and Public Services

Title of Activity: Success of a Business

Objective(s)

Students demonstrate knowledge of factors and conditions that affect the success of a new business.

Description of Activity

• Students select a place of business to research, such as a beauty salon, daycare center, restaurant kitchen, nursing home, retail store, or lawyer’s office. Information to be researched will include:
  ❍ List of goods or services provided
  ❍ Proposed clientele served
  ❍ Employee organization chart (career ladder)
  ❍ Local and federal regulations that apply
  ❍ Goals/objectives
  ❍ Business purpose
  ❍ Description of environment
• Students interview an owner/manager of the selected business type.
• Students compile lists of standards for safety, sanitation, interpersonal dynamics, technology, and other industry standards.
• Students prepare a report to the class (written and/or oral) including:
  ❍ List of applicable standards and regulations
  ❍ Information such as wages/benefits, dress code requirements, work hours, worker responsibilities, travel requirements, etc.
  ❍ Analysis of the likelihood of success for a business and factors that affect success

Materials/Resources

• Access to research materials

Comments/Modifications

Possible Standards Connections

English Language Arts
Languages Other than English
Mathematics, Science, and Technology
Health, Physical Education, and Family and Consumer Sciences
Social Studies
The Arts

Source/Credit

CDOS Writing Team.
Cross Reference Checklist

Human and Public Services Sample Activities

<table>
<thead>
<tr>
<th>Sample Activities</th>
<th>CDOS 3b</th>
<th>CDOS 1</th>
<th>CDOS 2</th>
<th>CDOS 3a</th>
<th>ELA</th>
<th>LOTE</th>
<th>MST</th>
<th>H/PE/FCS</th>
<th>SS</th>
<th>ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consumer Discontent</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>2. Teens Across the Eras</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>3. Teacher Attitudes</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>4. Bacteria in the Workplace</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>5. Careers for a Lifestyle</td>
<td>✔️ ✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>6. Crisis Management on the Job</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>7. Success of a Business</td>
<td>✔️ ✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

Possible Connecting Standards

ELA = English Language Arts Standards
LOTE = Languages Other than English Standards
MST = Mathematics, Science, and Technology Standards
H/PE/FCS = Health, Physical Education, Family and Consumer Sciences Standards
SS = Social Studies Standards
Arts = The Arts Standards
Career Development and Occupational Studies

Core Curriculum
Standard 3b
Career Clusters—
Natural and Agricultural Sciences
This section provides teachers with an organizational tool that connects the Career Development and Occupational Studies Learning (CDOS) Standard 3b with corresponding performance indicators. The goal of this core curriculum is to provide a user-friendly guide that links CDOS with other content areas and provides educators with a framework for lesson plan development.

**Standard 3b: Career Clusters**

Students who choose a career cluster will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

**1. Basic Agriculture Foundation Development**

**Performance Indicator:** Students demonstrate a solid base of knowledge and skills in natural and agricultural sciences.

**Students will:**

A. Understand the definition of the agricultural science industry.

B. Understand the importance of agriculture:
   1. Dollar value
   2. Number of people employed
   3. Products
   4. Services
   5. Job opportunities
   6. Regional and local agriculture
   7. National statistics
   8. Global economy

C. Identify careers in agriculture:
   1. Job opportunities
   2. Educational requirements

D. Identify and understand changes and trends in agriculture:
   1. Local
   2. County
   3. Regional
   4. State
   5. National
   6. Global

**Discussion Questions**

- What is agriculture and why is it important in our society?
E. Acquire skills and knowledge of systems for understanding basic agricultural areas:

1. Environmental science
   a. Ecosystems
   b. Population dynamics
   c. Soil, water, and air
   d. Waste reuse, recycling, and disposal
   e. Environmental management
   f. Wildlife
   g. Forestry
   h. IPM
   i. Energy

2. Plant science
   a. Classification and identification
   b. Physiology/reproduction
   c. Growth and development
   d. Financial management, marketing, and distribution of plant products
   e. Safety measures specific to plant science industry
   f. Food science and safety

3. Animal science
   a. Classification and identification
   b. Health and welfare issues
   c. Nutrition
   d. Reproduction
   e. Growth and development
   f. Animal management and behavior
   g. Safety in working with animals

4. Mechanical and technical sciences
   a. Safety
   b. Theories and principles
   c. Measurement
   d. Tool identification and maintenance
   e. Systems identification

5. Enterprise management
   a. Basic economic concepts
   b. Business management and planning
   c. Business records
   d. Markets and marketing
   e. Financial management
   f. Analysis of a business
   g. Purposes of agricultural business
   h. Production of food, fiber, ornamental, and recreational products and services
      i. Provide agricultural services to producers and consumers
      ii. Market and distribute agricultural products
      iii. Make a profit

F. Understand legal, ethical, technical, and social responsibilities related to agricultural areas.

G. Solve agriculture-related problems:
   1. Computations commonly used in agriculture
   2. Creative thinking and decision making
   3. Inquiry-based problem solving

H. Develop agricultural skills:
   1. FFA career development events
   2. Leadership events
   3. Internships, shadowing, and/or cooperative or classroom work experience
2. Agricultural-Related Technology

Performance Indicator: Students demonstrate the ability to use technology to assist in production and distribution of food goods and services of today’s agricultural industries.

Students will:
A. Understand current technologies:
   1. Computerized record keeping and analysis
   2. Interactive computer networking
   3. Applied technologies
B. Use tools and equipment.
C. Locate and use sources of information on current technologies.

Discussion Questions

- How have technology developments impacted agriculture?
- What technologies are used in today’s agricultural industries?
- What applied technology skills are needed to be successful in today’s agricultural industries?

3. Information Management and Communication

Performance Indicator: Students prepare, maintain, interpret, and disseminate quantitative and qualitative pieces of information relating to the natural and agricultural sciences.

Students will:
A. Select and use information sources related to agriculture:
   1. Periodicals
   2. Books
   3. Electronic resources
   4. Interviews or presentations
   5. Charts and graphs
B. Develop communication skills:
   1. Verbal/nonverbal
   2. Listening
   3. Writing
   4. Reading for information and interpretation
C. Apply communication skills:
   1. FFA career development events
   2. Leadership events
   3. Internship, shadowing, and/or cooperative or classroom work experience
   4. Oral presentations
   5. Following oral directions
   6. Writing reports
   7. Technical documentation
D. Create multimedia presentations, using appropriate technology.

Discussion Questions

- What information management and communication skills are essential in an agricultural career environment?
- What effects do information management and communication skills have on performance and productivity in the agriculture workplace?
- How are communication skills applied to natural and agricultural sciences?
4. Agriculture Business Systems

**Performance Indicator:** Students demonstrate an understanding of the interrelationship between agricultural businesses and organizations designed to produce products, services, and information.

**Students will:**
A. Understand the cycle of agricultural businesses:
   1. Research
   2. Supplies
   3. Services
   4. Information
   5. Production
   6. Processing
   7. Marketing
   8. Distribution
B. Understand the structure of agricultural business organizations:
   1. Sole proprietorship
   2. Partnership
   3. Corporation
   4. Cooperative
   5. Franchise
   6. Subcontracting
C. Understand consumer rights and governmental regulations:
   1. Industry organizations
   2. Local, state, and national agencies
   3. Community organizations
   4. Special interest groups

**Discussion Questions**
• What relationships exist between agricultural sectors and our general society?
• What ownership arrangements exist in agricultural business systems?
• How are agricultural enterprise decisions influenced by non-agricultural organizations and governmental policies?

5. Resource Management

**Performance Indicator:** Students demonstrate the ability to manage personal time, business, and financial resources.

**Students will:**
A. Understand personal resources management:
   1. Using time effectively
   2. Planning, organizing, and setting goals
   3. Developing knowledge and skills
   4. Evaluating performance
B. Understand business resources management:
   1. Identifying resources
   2. Selecting resources
   3. Securing resources
   4. Managing resources
C. Understand financial resources management:
   1. Budgeting
   2. Banking
   3. Obtaining credit
   4. Investing
D. Understand human resources management:
   1. Compensation
   2. Supervision
E. Understand record keeping:
   1. Personal resources
   2. Business resources
   3. Financial resources

**Discussion Questions**
• What personal, business, financial, and human resources are needed by an agricultural enterprise?
• How are personal, business, financial, and human resources managed by agricultural enterprises?
6. Interpersonal Dynamics

**Performance Indicator:** Students demonstrate the interpersonal skills and abilities needed to function within a sophisticated and sometimes complicated agricultural environment.

**Students will:**
A. Identify qualities needed for workplace success:
   1. Responsibility for self and others
   2. Self-esteem
   3. Social interaction
   4. Teamwork
   5. Self-motivation
   6. Adaptability to change
   7. Ability to work with and benefit from a multicultural workforce
   8. Ethical, legal, and workplace responsibilities
B. Develop personal qualities:
   1. Dedication
   2. Integrity
   3. Honesty
   4. Punctuality
   5. Appearance
   6. Tolerance
C. Identify and develop leadership/team skills:
   1. Group dynamics
   2. Meeting procedures
   3. Styles of leadership
   4. Skills and responsibilities of FFA officers and members

**Discussion Questions**
- What positive personal attributes are necessary to successfully function in today’s agricultural environment?
- How do individuals provide leadership in group and/or team settings?

7. Safety

**Performance Indicator:** Students demonstrate awareness of the importance of safety and accident prevention in all agricultural situations.

**Students will:**
A. Understand and interpret industry safety statistics.
B. Identify types of hazards:
   1. Chemical
   2. Mechanical
   3. Biological
C. Identify location of hazards:
   1. Home
   2. Workplace
   3. Environment
D. Identify safety precautions to prevent accidents:
   1. Attitude
   2. Alertness
   3. Knowledge
   4. Pace
   5. Age and maturity
   6. Safety devices and practices
E. Identify regulatory agencies:
   1. Local
   2. State
   3. National
   4. Industry-specific

**Discussion Questions**
- An agricultural worker should be aware of what safety hazards?
- What behaviors and safety precautions must an agricultural worker exhibit and/or observe when working in an agricultural setting?
- How do regulatory agencies affect working conditions in agricultural situations?
Career & Development
Occupational Studies

Sample Activities
Standard 3b
Career Clusters—
Natural and Agricultural Sciences
# Sample Activities

<table>
<thead>
<tr>
<th>Sample Activities</th>
<th>Page</th>
<th>CDOS and Possible Connecting Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective Breeding</td>
<td>298</td>
<td>CDOS; MST</td>
</tr>
<tr>
<td>Digestive Systems</td>
<td>299</td>
<td>CDOS; ELA; MST; H/PE/FCS</td>
</tr>
<tr>
<td>Hydroponics System</td>
<td>300</td>
<td>CDOS; MST</td>
</tr>
<tr>
<td>Growing Marigolds</td>
<td>301</td>
<td>CDOS; ELA; MST</td>
</tr>
<tr>
<td>Plant Science Research Paper</td>
<td>302</td>
<td>CDOS; ELA; SS</td>
</tr>
<tr>
<td>Tree Samples</td>
<td>303</td>
<td>CDOS; MST</td>
</tr>
<tr>
<td>Soil Survey</td>
<td>304</td>
<td>CDOS; MST</td>
</tr>
</tbody>
</table>

Possible Connecting Standards

ELA = English Language Arts Standards  
LOTE = Languages Other than English Standards  
MST = Mathematics, Science, and Technology Standards  
H/PE/FCS = Health, Physical Education, and Family and Consumer Sciences Standards  
SS = Social Studies Standards  
Arts = The Arts Standards
Title of Activity: Selective Breeding

Objective(s)
Students conduct breeding trials comparing the results from natural selection and selective breeding simulations.

Description of Activity
- Students are given a gene pool (utilize beans or other organic materials, as long as there are two colors). Students then simulate mating by drawing beans from other class members and pairing the selected beans with those from their own gene pool. With each pair, students record the genotype and phenotype for each mating. The goal is to achieve a pure color strain.
- The first mating is random. With each successive mating, students select the next mating on the basis of the genotype results in order to maximize the probability of achieving the pure color strain.
- Students compare the total number of breeding trials necessary to achieve a pure color strain.

Materials/Resources
- materials for gene pool

Comments/Modifications
- This activity could also be used for plant science.

Source/Credit
Submitted by Bruce Rohr, Holly Partridge, and Mary Rumble.

Estimated Time: 1 hour
# COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

## Natural and Agricultural Sciences

### Title of Activity: Digestive Systems

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

**Estimated Time:** 2 hours

### OBJECTIVE(S)

Students develop a model of a digestive system and understand its parts and functions.

### DESCRIPTION OF ACTIVITY

- Students construct a model of one of the following digestive systems: monogastric, ruminant, avian, or equine. They are to label all major parts and functions.
- Students prepare a written summary of the digestive pathway to accompany the model (for use at elementary schools and/or an open house, for example).

### MATERIALS/RESOURCES

- Classroom supplies for model construction

### COMMENTS/MODIFICATIONS

- If students present to the class, they compare and contrast all types of systems.

### SOURCE/ CREDIT

Submitted by Holly Partridge and Mary Rumble.

### COMMENCEMENT STANDARDS

<table>
<thead>
<tr>
<th>Natural and Agricultural Sciences (3b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic Agriculture Foundation</td>
</tr>
<tr>
<td>2. Agriculture-Related Technology</td>
</tr>
<tr>
<td>3. Information Management and</td>
</tr>
<tr>
<td>Communication</td>
</tr>
<tr>
<td>4. Agriculture Business Systems</td>
</tr>
<tr>
<td>5. Resource Management</td>
</tr>
<tr>
<td>6. Interpersonal Dynamics</td>
</tr>
</tbody>
</table>

#### Career Development (1)

| 1. Complete development of career plan |
| 2. Apply decision-making skills in    |
| selection of a career option          |
| 3. Analyze skills and abilities in a  |
| career option                         |

#### Integrated Learning (2)

| 1. Demonstrate integration and application |
| 2. Use academic knowledge and skills     |
| 3. Research, interpret, analyze, and evaluate information |

#### Universal Foundation Skills (3a)

| 1. Basic Skills |
| 2. Thinking Skills |
| 3. Personal Qualities |
| 4. Interpersonal Skills |
| 5. Technology |
| 6. Managing Information |
| 7. Managing Resources |
| 8. Systems |

### POSSIBLE STANDARDS CONNECTIONS

| English Language Arts |
| Languages Other than English |
| Mathematics, Science, and Technology |
| Health, Physical Education, and Family and Consumer Sciences |
| Social Studies |
| The Arts |
Title of Activity: Hydroponics System

GRADE
9 10 11 12

Objective(s)
Students create an operational hydroponics system, using appropriate hydroponics theory and construction methods.

Description of Activity
• Students design and construct a hydroponics system, using the nutrient flow technique that allows successful germination and growth of the selected vegetable seeds. Correct design and construction methods must be used.
• Students collect daily observations for both the rate of germination and plant growth. They then summarize results and conclusions of their design.
• Students present results to the class. Comparisons across systems will be made and will focus on system design and its impact on seed germination and plant growth.

Materials/Resources
• 1’ x 4’ lumber
• 5-gallon pail
• 2” diameter pvc pipe
• Aquarium pump
• Vegetable seeds
• Paper towels
• Wire mesh

Comments/Modifications

Possible Standards Connections

Source/Credit
Submitted by Jon Clayson and Jeff Perry.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Natural and Agricultural Sciences

Title of Activity: Growing Marigolds

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

Estimated Time: 1–5 days

OBJECTIVE(S)
Given the proper instructional materials and equipment, students propagate a group of marigold plants from seed to mature plant. Students record all information relating to the plants’ growth and development.

DESCRIPTION OF ACTIVITY
- Students in a group laboratory activity propagate marigold plants, using a variety of planting mediums (soil, water, etc.).
  - Students plant seeds in a controlled environment.
  - A specific number of control plants are assigned to each student.
  - Students identify a variable of interest (e.g., quantity of light, fertilizer, temperature, etc.) and conduct an experimental trial comparing growth of the “control” plants to those in the “experimental” group in which one of the variables has been systematically varied.
  - Students collect data on germination and plant growth.
  - Students present results of their experiments to the class. Comparisons are made among the variables investigated to determine what factors impact seed germination and plant growth.

MATERIALS/RESOURCES
- Marigold plant seeds
- Planting/potting supplies

COMMENTS/MODIFICATIONS

SOURCE/CREDIT
Submitted by Susan F. Nagan, OCM BOCES.
Title of Activity: Plant Science Research Paper

OBJECTIVE(S)
Students develop a research paper addressing the international production of a selected crop.

DESCRIPTION OF ACTIVITY
- Students select a plant crop to research, and then they write a paper on their findings. The paper could include information regarding the following:
  - Countries in which the crop is produced
  - Comparison and contrast of the crop production practices of each of the major crop-producing countries
  - Major products produced from the crop
  - Regional, national, and/or international regulations related to the crop

MATERIALS/RESOURCES
- Access to research documents

COMMENTS/MODIFICATIONS

SOURCE/CREDIT
Submitted by Donna Moore.
# COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

## Natural and Agricultural Sciences

### Title of Activity: Tree Samples

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

### Estimated Time: 2–3 class periods

**OBJECTIVE(S)**

Students compile a collection of tree specimens that will serve as an identification manual for trees found in New York.

### DESCRIPTION OF ACTIVITY

- Students collect a minimum of 15 tree samples (e.g., leaf, twig, bark, rubbing). The samples should include both conifers and deciduous trees.
- Each sample should be mounted. Descriptive information provided for each sample should include:
  - Common name
  - Scientific name
  - Unusual qualities
  - Uses
  - Environmental and/or growth requirements

### MATERIALS/RESOURCES

### COMMENTS/MODIFICATIONS

### SOURCE/CREDIT

Submitted by Tina Miner-James and Bruce Rohr.

## COMMENCEMENT STANDARDS

### Natural and Agricultural Sciences (3b)

1. Basic Agriculture Foundation
2. Agriculture-Related Technology
3. Information Management and Communication
4. Agriculture Business Systems
5. Resource Management
6. Interpersonal Dynamics

### Career Development (1)

1. Complete development of career plan
2. Apply decision-making skills in selection of a career option
3. Analyze skills and abilities in a career option

### Integrated Learning (2)

1. Demonstrate integration and application
2. Use academic knowledge and skills
3. Research, interpret, analyze, and evaluate information

### Universal Foundation Skills (3a)

1. Basic Skills
2. Thinking Skills
3. Personal Qualities
4. Interpersonal Skills
5. Technology
6. Managing Information
7. Managing Resources
8. Systems

## POSSIBLE STANDARDS CONNECTIONS

- English Language Arts
- Languages Other than English
- Mathematics, Science, and Technology
- Health, Physical Education, and Family and Consumer Sciences
- Social Studies
- The Arts
Title of Activity: Soil Survey

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

Estimated Time: 2 class periods

**OBJECTIVE(S)**
Students determine and compare texture and pH in soil samples.

**DESCRIPTION OF ACTIVITY**
- Students collect three different samples of soil, preferably from areas different in land use (e.g., home, school, public parks, business districts, areas with high pedestrian traffic, etc.) and determine soil texture and pH for each.
- Students chart results in a table or graph, comparing differences.
- Students evaluate how these characteristics may affect plant growth, cultural practices, and soil management practices.
- Students offer explanations for differences between the soil samples and explain how these differences are related to land use.
- Finally, they summarize their results in oral presentations to the class.

**MATERIALS/RESOURCES**
- Soil samples (collected by students)
- pH test kits

**COMMENTS/MODIFICATIONS**
- Soil samples (collected by students)
- pH test kit

**SOURCE/ CREDIT**
Submitted by WestEd.
## Cross Reference Checklist

### Natural and Agricultural Sciences Sample Activities

<table>
<thead>
<tr>
<th>Sample Activities</th>
<th>CDOS 3b</th>
<th>CDOS 1</th>
<th>CDOS 2</th>
<th>CDOS 3a</th>
<th>ELA</th>
<th>LOTE</th>
<th>MST</th>
<th>H/PE/FCS</th>
<th>SS</th>
<th>ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Selective Breeding</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Digestive Systems</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hydroponics System</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Growing Marigolds</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Plant Science Research Paper</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>6. Tree Samples</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Soil Survey</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Possible Connecting Standards

ELA = English Language Arts Standards  
LOTE = Languages Other than English Standards  
MST = Mathematics, Science, and Technology Standards  
H/PE/FCS = Health, Physical Education, and Family and Consumer Sciences Standards  
SS = Social Studies Standards  
Arts = The Arts Standards
Career Development & Occupational Studies

Core Curriculum

Standard 3b
Career Clusters—Arts/Humanities
This section provides teachers with an organizational tool that connects the Career Development and Occupational Studies (CDOS) Learning Standard 3b with corresponding performance indicators. The goal of this core curriculum is to provide a user-friendly guide that links CDOS with other content areas and provides educators with a framework for lesson plan development.

**Standard 3b: Career Clusters**

Students who choose a career cluster will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

### 1. Foundations

**Performance Indicator:** Students demonstrate a solid base of knowledge/skills in one or more of the disciplines and the related professions of visual art, dance, music, theatre, and humanities.

**Students will:**
- Develop core discipline knowledge and skills.
- Develop supporting specialized content skills.
- Develop the ability to synthesize information across disciplines.
- Develop heightened awareness of internal processes and external stimuli.
- Document the past, reflecting the present, and anticipating future contributions across time and cultures.

**Discussion Questions**

- How are foundation skills necessary for success in the arts?

### 2. Communications

**Performance Indicator:** Students demonstrate the reading, writing, listening, speaking, and graphic and multimedia skills necessary to participate effectively in one or more of the arts/humanities.

**Students will:**
- Develop literacy skills:
  1. Visual
    a. Reading
      i. Use written text to gather information or perform a task
      ii. Read graphs, charts, maps, blueprints
    b. Drawing/painting—communicate a theme
    c. Dance—express a theme, emotion, or idea
    d. Theatre—convey a theme, emotion, or idea through the use of costumes and scenery
    e. Music—view a performance
    f. Photography—create a mood through the use of lighting
  - Discussion Questions
    - What communication skills enhance production of the arts?
2. Oral
   a. Speaking—use words to clearly communicate ideas or information (e.g., give a persuasive speech)
   b. Debate—argue a point of view
   c. Theatre—deliver a soliloquy
   d. Music—sing a solo
   e. Visual art—describe a piece of artwork
   f. Interview techniques

3. Aural
   a. Listening—follow verbal instructions
   b. Music—distinguish families of instruments (e.g., know difference between wind and brass instruments)
   c. Dance—interpret music in movements

4. Written
   a. Use written words to express ideas, opinions, or concepts
   b. Compose a four-measure rhythmic phrase
   c. Compare and contrast a style/period of art
   d. Write a critique (e.g., plays, movies, works of art)
   e. Write in a journal

5. Nonverbal/kinetic (movement)
   a. Dance
   b. Pantomime
   c. Puppetry
   d. Symbolism
   e. Sign language
   f. Body language, gestures
   g. Use of a musical graphic device
   h. Textiles (e.g., communication through quilting)

6. Tactile
   a. Feel object to draw a picture, do a sculpture
   b. Use Braille to read
   c. Read keys of an instrument (e.g., piano, string instruments)
   d. Use different fabrics in design (e.g., fiber art, quilting)
   e. Use rough, smooth, or jagged textures to express emotions

B. Identify and use appropriate multimedia tools for specific disciplines:
   1. Videography, filmmaking, video arts
   2. Computer application, computer arts
   3. Software (e.g., PowerPoint, Photoshop, etc.)
   4. Creative sound
   5. MIDI applications
   6. Graphic arts (e.g., digital printing, silk screen, etching)
   7. Photography (e.g., holography)
3. Aesthetics

**Performance Indicator:** Students demonstrate the ability to express informed judgments about the arts/humanities and related professions.

**Students will:**

A. Develop and practice response:
   1. Definition: an audience’s cognitive, physical, and/or emotional experience with art
   2. Factors that affect response
      a. Life experiences
      b. Cultural/historical context
      c. Education
      d. Mental/physical abilities
      e. Belief system/philosophy

B. Understand and develop critical analysis/valuing:
   1. Definition: the evaluation of a response is based upon the fundamental principles and social context of each discipline
   2. Areas for analysis
      a. Structure
      b. Technique
      c. Skill level
      d. Composition

Discussion Questions

- How do individual experiences and critical analysis skills affect responses to the arts?

4. Personal Qualities

**Performance Indicator:** Students demonstrate the skills necessary to function and interact effectively in a variety of settings within the arts/humanities.

**Students will:**

A. Understand and practice responsibility:
   1. Punctuality
   2. Reliability
   3. Integrity

B. Understand and practice cooperation:
   1. Consideration
   2. Collaboration
   3. Courtesy
   4. Thoughtfulness
   5. Flexibility

C. Understand and practice motivation:
   1. Fortitude
   2. Perseverance

D. Understand and practice intuition:
   1. Sensitivity
   2. Curiosity

E. Understand and practice risk taking:
   1. Courage
   2. Ability to set trends
   3. Independence
   4. Confidence
   5. Assertiveness
   6. Inventiveness
   7. Openness to criticism

F. Understand and practice physical and mental wellness.

Discussion Questions

- How do personal qualities contribute to individual success as a productive member of the artistic community?
5. Creative Processes and Practices

**Performance Indicator:** Students demonstrate a repertoire of experience when presenting an exhibition, performance, portfolio, or publication.

**Students will:**

A. Practice innovation:
   1. Divergent thinking
   2. Thinking out of the box
   3. Ability to integrate concepts
   4. Resourcefulness

B. Practice critiquing/evaluation:
   1. Communication
   2. Internal processes
   3. Reflection
   4. External processes
   5. Exhibition

C. Practice problem solving:
   1. Imagination
   2. Improvisation
   3. Vision

---

6. Making Results Public

**Performance Indicator:** Students create an ongoing portfolio that demonstrates the competencies and creative processes delineated in the preceding key ideas.

**Students will:**

A. Understand techniques of exhibition:
   1. Selection
   2. Preparation
   3. Promotion
   4. Presentation

B. Develop a portfolio:
   1. Internal uses (e.g., growth and career planning)
   2. External uses (e.g., job search, college admissions, scholarships)
   3. Recognition (e.g., contests, applause, awards)

C. Prepare and deliver a culminating public event:
   1. Musical or dramatic production, or preparation of an individual audition/ monologue
   2. Dance recital or community collaboration for festivities
   3. Fashion show
   4. Group or individual art show
   5. Yearbook or video yearbook

D. Understand the importance of public advocacy, community education, and marketing:
   1. Parental involvement
   2. Documentation
   3. Dissemination
   4. School/business partnerships

---

**Discussion Questions**

- Why are the creative processes intrinsic to production of the arts?
Career Development & Occupational Studies

Sample Activities

Standard 3b
Career Clusters—Arts/Humanities
### CAREER CLUSTERS — ARTS/HUMANITIES

#### Sample Activities

<table>
<thead>
<tr>
<th>Sample Activities</th>
<th>Page</th>
<th>CDOS and Possible Connecting Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newsletter</td>
<td>316</td>
<td>CDOS; ELA; Arts</td>
</tr>
<tr>
<td>Teen Curators</td>
<td>317</td>
<td>CDOS; ELA; H/PE/FCS; SS; Arts</td>
</tr>
<tr>
<td>Making a Sundial</td>
<td>318</td>
<td>CDOS; ELA; MST; Arts</td>
</tr>
<tr>
<td>Community Services</td>
<td>319</td>
<td>CDOS; ELA; H/PE/FCS; Arts</td>
</tr>
<tr>
<td>Artistic Enterprise</td>
<td>320</td>
<td>CDOS; ELA; H/PE/FCS; Arts</td>
</tr>
<tr>
<td>Scene from a Play</td>
<td>321</td>
<td>CDOS; ELA; SS; Arts</td>
</tr>
<tr>
<td>Performance Publicity/Review</td>
<td>322</td>
<td>CDOS; ELA; Arts</td>
</tr>
<tr>
<td>Art Gallery</td>
<td>323</td>
<td>CDOS; SS; Arts</td>
</tr>
<tr>
<td>Interdisciplinary Project</td>
<td>325</td>
<td>CDOS; ELA; SS; Arts</td>
</tr>
<tr>
<td>Music Appreciation Class</td>
<td>326</td>
<td>CDOS; Arts</td>
</tr>
</tbody>
</table>

Possible Connecting Standards

ELA = English Language Arts Standards
LOTE = Languages Other than English Standards
MST = Mathematics, Science, and Technology Standards
H/PE/FCS = Health, Physical Education, and Family and Consumer Sciences Standards
SS = Social Studies Standards
Arts = The Arts Standards
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Arts/Humanities

Title of Activity: Newsletter

| GRADE | 9 | 10 | 11 | 12 |

Estimated Time: ongoing term project

OBJECTIVE(S)
Students develop a class art and literature newsletter based upon an agreed-upon and relevant theme(s).

DESCRIPTION OF ACTIVITY
- Class will select an editorial board for their newsletter (published four times a year) from among themselves, including a publisher, editors, researchers, writers, a marketing staff, a graphic designer and layout team, printer, distributors, and other necessary personnel.
- This team will select a theme(s) for the newsletter, and all members of the class will be writers. Students will develop a timeline and editorial calendar, and over the course of the term, students will use the writing skills learned in English and humanities classes to write articles and develop artwork related to the themes selected. The magazine will be distributed for a small cost to help raise money to sustain the project. Subscriptions may be enlisted.

MATERIALS/RESOURCES
- Computer with multimedia and publishing software
- Printer

COMMENTs/MODIFICATIONS
- This activity is appropriate for any grade and any subject area.

MATERIALS/RESOURCES
- Computer with multimedia and publishing software
- Printer

SOURCE/CREDIT
Submitted by Nancy Shankman, Office of the Superintendent of Bronx High Schools.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Arts/Humanities

Title of Activity: Teen Curators

GRADE

9 | 10 | 11 | 12

Estimated Time: 3 weeks

OBJECTIVE(S)
Teen curators mount a high school museum exhibit on American culture.

DESCRIPTION OF ACTIVITY
- Students select a time period in American history and mount an exhibit that shows the culture of the times. The exhibit could be divided into sections such as:
  - Events in the U.S./world—Large text explanations, newspaper clippings, film footage, etc. depicting the historical and social context of the period. This could be integrated with curriculum covered in social studies classes.
  - Events in the home—Photographs (researched or original designs) and actual or copied artifacts showing the prevailing styles and tastes in architecture, interior design, furniture, accessories, clothing, hairstyles, etc.
  - Events in the arts—Text, visual, and/or recorded samples of the popular dance, theatre, music, literature, and visual arts of the era. Music of the era recorded by the high school jazz band or orchestra, could be played to accompany the exhibit.
- Students involved would need to research and learn how to properly mount and display various forms of art and literature. This could be either a one-time, one-era project or an ongoing, changing exhibition.

MATERIALS/RESOURCES

COMMENTS/MODIFICATIONS
- This activity could be modified to reflect any era in American history such as Colonial times, the Depression era, World War II, the fifties, etc.
- This activity could be integrated with an American history course.
- A local antique store might be willing to lend pieces of furniture or accessories for display in the exhibit in exchange for the advertising gained.

SOURCE/CREDIT
Submitted by Rosanna Frank.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Arts/Humanities

Title of Activity: Making a Sundial

Estimated Time: 2 weeks - 2 months or semester, depending on craft chosen

GRADE

9 10 11 12

OBJECTIVE(S)
Students demonstrate their competencies via a permanent, functional, community-based object. They learn about and gain appreciation of the interdependence of artists, scientists, and craftspeople.

DESCRIPTION OF ACTIVITY
• Throughout human history every civilization—Greeks, Babylonians, Egyptians—relied on the sun to learn the time of day and season of the year. A sundial was a merger of aesthetics, craftsmanship, and science. The two parts of the sundial are the gnomon and the clock face. The gnomon is made from a piece of sheet metal thick enough to resist bending yet flexible enough to attach to the clock face in the north-south direction. The shadow line it casts must be thin enough to make a readable line. Complete directions for calibrating the face and positioning are available in library resource books. The sundial should be accurate within 10 minutes of mean time.
• Personnel and materials available on site will determine the craft process chosen to culminate this project. Possibilities are an etched metal plate, a glazed clay low-relief plaque, reverse painting on glass or acrylic, or a carved or etched stone or slate. The collaboration of local craftsmen (i.e., landscape gardener, architect, astrologer, horologist, mason, carpenter, calligrapher) is desirable.
• Procedure:
  □ Select location on school grounds or in a public space.
  □ Go to library, read a reference text.
  □ Make preliminary drawings for face (motto), gnomon, and pedestal.
  □ Follow the step-by-step directions in the text.
  □ Decide on the craft technique; locate a technical assistant, if possible.
  □ Experiment and practice with alphabets, calligraphy, face designs.
  □ Have community vote on best overall design.
  □ Construct, install, and dedicate.

MATERIALS/RESOURCES
• Sheet metal
• Reference texts

COMMENTS/MODIFICATIONS
• Diverse cultures are reflected in the changing styles and technologies of sundials.

SOURCE/ CREDIT
Submitted by Sylvia K. Corwin, Arts Education Group.
### Title of Activity: Community Services

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

#### OBJECTIVE(S)

Students in grades 9 and 10 describe and compare the various services provided in the community by researching organizations that promote the arts.

#### DESCRIPTION OF ACTIVITY

- In your community there are places and organizations that promote the arts (e.g., dance, theatre, music, and visual arts). Some examples of these places are: the public library, local cable TV stations, radio stations, newspapers, and museums. Choose one of the arts disciplines and select a place or organization that promotes your choice. Spend 10 hours volunteering and observe firsthand how this organization promotes your selected arts discipline. Record your observations in a journal.

#### MATERIALS/RESOURCES

- This activity is adapted from Music Standard 2, Performance Indicator b.

#### COMMENTS/MODIFICATIONS

- This activity is adapted from Music Standard 2, Performance Indicator b.

#### SOURCE/CREDIT

Submitted by Earl Groner and Nadine McDermott, New York State School Music Association and New York State Assessment Team.
Title of Activity: Artistic Enterprise

OBJECTIVE(S)
Students explore and present all aspects of an “art” business (e.g., dance/theatre company, art museum, fashion design house, concert venue, etc.) from business conception to the creation of a final consumer product.

DESCRIPTION OF ACTIVITY
• Students are divided into groups, and each group operates as a company. Each group conducts research on similar businesses in their selected field, contacting local examples when possible. Students write and present a marketing plan to the class, including the following information:
  ❍ Title/description of business
  ❍ Design of business card/logo
  ❍ Plan for a season: performances, pieces, events, etc. offered, and why these are chosen
  ❍ Price of product (art pieces, tickets to performances, other merchandise, etc.), and how prices are determined
  ❍ Whether enterprise is for-profit or nonprofit
  ❍ Whether company would pursue community partnerships (e.g., exchanging products for other artistic goods/services; offering discounts to other local art businesses)
  ❍ Promotion: what types of events could be planned to promote new business/product; who target audience is; how to attract people/gain audience
• Sample of product (or sample of artistic work promoted) is presented in class
• Written marketing plan should be typed and turned in to the teacher after the class presentation.

MATERIALS/RESOURCES

COMMENTS/MODIFICATIONS
• Multimedia presentation could be required.

SOURCE/CREDIT
CDOS Writing Team.
**COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY**

**Arts/Humanities**

**Title of Activity:** Scene from a Play

**GRADES:**

| 9 | 10 | 11 | 12 |

**Objective(s):** Students research, design, and perform a scene from a play.

**Description of Activity**

- Class will select a play from which to perform a scene. Each student will have a specific role, and the class as a group will choose the actors, director, costume designer, set/lighting designer, and production crew. Students will each act as dramaturge, conducting research on the play’s setting (time period, place, social/political climate, etc.) and determining how it affects their roles within the production of the play. Each student will keep a journal of research findings, prepartations, progress, and reflections. Students will conduct rehearsals and plan a final performance.

- Some guidelines may be used to help students with research as related to their individual roles. Students should read the entire play and research the play’s setting. Suggestions for specific additional research are as follows:
  - **Actors:** write character analysis, including past events of life, goals, fears, hobbies, likes/dislikes, motivation of character’s actions within the setting of the play, and any other pertinent personal information about the character. Should be creative in constructing character’s past and use it to guide choices they make within the scene they perform. Written motivation of action/dialogue within scene is encouraged.
  - **Director:** work closely with entire group to incorporate all aspects of staging/production into cohesive plan. This involves time management (specifically with rehearsals), verifying historical accuracy of design choices, assisting actors with character development, and ensuring that design choices complement one another. Should conduct additional research on playwright and should give thought to **blocking** within scene, interpretation of dialogue, stage directions, etc.
  - **Costume designer:** conduct research on the clothing styles of the time, specifically related to the locale, age, socioeconomic class, profession, and gender of characters. Additional thought should be given to characters’ personality and role within the play when selecting costumes. Should also help production crew with sketches and assembling/sewing of costumes.
  - **Set/lighting designer:** conduct detailed research on physical and social setting of the play. Depending on where the scene takes place, this could include furniture, architecture, decoration, pop culture (magazines/newspapers/music/television/movies), geography, etc. Additional thought should be given to how lighting and music affect mood/tone. Research on previous productions of play could be done.
  - **Production crew:** work with the designers to create costume and set sketches, and research where materials for designs could be found. They (with directors) realize designs through construction of set, sewing of costumes, and procurement of props/costume materials/other staging needs.

**Materials/Resources**

**Comments/Modifications**

**Source/Credit**

Submitted by WestEd.
Arts/Humanities

Title of Activity: Performance Publicity/Review

Objective(s)
Students publicize and review local public artistic/creative performance.

Description of Activity
- Students conduct research on upcoming performances in their community, using:
  - Newspapers
  - Schedules from local arts/cultural organizations, performance halls, universities
  - Library, café, and other community postings
- Students select an upcoming performance and compile a press release to be published in their school or community newspaper. Research on previous productions of performance and/or published articles/reviews (when available) should be used in compiling the press release.
- Students publicize the performance within their school (e.g., through flyers, announcements) and attend one performance.
- Students review the performance, and discuss how their publicity efforts may affect their review.

Materials/Resources

Comments/Modifications

Possible Connections
- English Language Arts
- Languages Other than English
- Mathematics, Science, and Technology
- Health, Physical Education, and Family and Consumer Sciences
- Social Studies
- The Arts

Submitted by WestEd.
COMMENCEMENT—CAREER CLUSTERS SAMPLE ACTIVITY

Arts/Humanities

Title of Activity: Art Gallery

| GRADE | 9 | 10 | 11 | 12 |

Estimated Time: 1–3 weeks

OBJECTIVE(S)
Students create and install their own visual art pieces.

DESCRIPTION OF ACTIVITY
- The teacher provides a social or historical theme (can also be related to current events) and each student designs and creates a visual representation of the theme. Students are encouraged to use different materials and media to realize their piece; pieces may be installation pieces, sculptures, multimedia pieces, paintings, etc.

MATERIALS/RESOURCES
- Dependent upon individual projects

COMMENTS/MODIFICATIONS
- The class locates and chooses a site in which the art may be installed and the duration for which it may be installed. Each student writes a brief description of their piece and the materials used to create it, and these are included in the installation. The installation should be in a location accessible to other students and/or the public, and questionnaires may be included for visitors (see sample on page 324).

SOURCE/CREDIT
Submitted by WestEd.

<table>
<thead>
<tr>
<th>COMMENCEMENT STANDARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts/Humanities (3b)</td>
</tr>
<tr>
<td>1. Foundations</td>
</tr>
<tr>
<td>2. Communication</td>
</tr>
<tr>
<td>3. Aesthetics</td>
</tr>
<tr>
<td>4. Personal Qualities</td>
</tr>
<tr>
<td>5. Creative Processes and Practices</td>
</tr>
<tr>
<td>6. Making Results Public</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career Development (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete development of career plan</td>
</tr>
<tr>
<td>2. Apply decision-making skills in selection of a career option</td>
</tr>
<tr>
<td>3. Analyze skills and abilities in a career option</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrated Learning (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate integration and application</td>
</tr>
<tr>
<td>2. Use academic knowledge and skills</td>
</tr>
<tr>
<td>3. Research, interpret, analyze, and evaluate information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Universal Foundation Skills (3a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic Skills</td>
</tr>
<tr>
<td>2. Thinking Skills</td>
</tr>
<tr>
<td>3. Personal Qualities</td>
</tr>
<tr>
<td>4. Interpersonal Skills</td>
</tr>
<tr>
<td>5. Technology</td>
</tr>
<tr>
<td>6. Managing Information</td>
</tr>
<tr>
<td>7. Managing Resources</td>
</tr>
<tr>
<td>8. Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POSSIBLE STANDARDS CONNECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Arts</td>
</tr>
<tr>
<td>Languages Other than English</td>
</tr>
<tr>
<td>Mathematics, Science, and Technology</td>
</tr>
<tr>
<td>Health, Physical Education, and Family and Consumer Sciences</td>
</tr>
<tr>
<td>Social Studies</td>
</tr>
<tr>
<td>The Arts</td>
</tr>
</tbody>
</table>
Sample Questionnaire

1) Please circle if you are a (all that apply):

- student
- teacher
- visitor
- friend/relative of exhibiting artist

2) How interesting/engaging did you find the exhibit?

- very interesting
- interesting
- somewhat interesting
- uninteresting

3) What do you think the theme of the exhibit is?

4) Which works did you particularly enjoy and why?

5) What comments or suggestions would you have regarding the installation?
**Title of Activity:** Interdisciplinary Project

**Estimated Time:** 2 weeks

**GRADE**

|   | 9 | 10 | 11 | 12 |

**OBJECTIVE(S)**

Students compare themes and trends across different artistic genres in a given period of time.

**DESCRIPTION OF ACTIVITY**

- Each student selects a distinct time period (e.g., between the World Wars) or artistic movement (e.g., Romanticism) and explores how different artistic disciplines of the time influenced and/or paralleled one another. Students also discuss what historical events may have shaped or spawned the dominant themes of the time, and should support their analysis with specific examples of works. Finally, students should compare works of their chosen time period/movement with works from a previous period/movement to highlight changes and developments. Students should choose at least two of the following genres to focus on in their comparison:
  - Visual art
  - Theatre
  - Film
  - Music
  - Literature
  - Architecture
- Students may present their information in a research paper or in the creation of artistic works that embody/depict dominant themes of the time. If students choose to submit works, at least two genres must be represented.

**MATERIALS/RESOURCES**

- Access to research documents

**COMMENTS/MODIFICATIONS**

**COMMENCEMENT STANDARDS**

**Arts/Humanities (3b)**

- 1. Foundations
- 2. Communication
- 3. Aesthetics
- 4. Personal Qualities
- 5. Creative Processes and Practices
- 6. Making Results Public

**Career Development (1)**

- 1. Complete development of career plan
- 2. Apply decision-making skills in selection of a career option
- 3. Analyze skills and abilities in a career option

**Integrated Learning (2)**

- 1. Demonstrate integration and application
- 2. Use academic knowledge and skills
- 3. Research, interpret, analyze, and evaluate information

**Universal Foundation Skills (3a)**

- 1. Basic Skills
- 2. Thinking Skills
- 3. Personal Qualities
- 4. Interpersonal Skills
- 5. Technology
- 6. Managing Information
- 7. Managing Resources
- 8. Systems

**POSSIBLE STANDARDS CONNECTIONS**

- English Language Arts
- Languages Other than English
- Mathematics, Science, and Technology
- Health, Physical Education, and Family and Consumer Sciences
- Social Studies
- The Arts

Submitted by WestEd.
### Arts/Humanities

**Title of Activity:** Music Appreciation Class

**Estimated Time:** 2 class periods

<table>
<thead>
<tr>
<th>GRADE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
</table>

#### OBJECTIVE(S)
Students plan and teach a music appreciation class for elementary school students.

#### DESCRIPTION OF ACTIVITY
- Students determine an elementary school or teacher to serve as partner/host.
- Students then design a music appreciation class that will be interactive, age-appropriate, and instructive on basic music principles such as:
  - Pitch
  - Rhythm
  - Tempo
  - Dynamics
  - Tone
  - Classification and use of instruments
- Students deliver the lesson. The elementary school class then uses these principles to create an original group composition, compare and contrast different types of music, or perform an existing piece of music.

#### MATERIALS/RESOURCES

#### COMMENTS/MODIFICATIONS

#### SOURCE/CREDIT
Submitted by WestEd.

#### COMMENCEMENT STANDARDS

<table>
<thead>
<tr>
<th>Arts/Humanities (3b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Foundations</td>
</tr>
<tr>
<td>2. Communication</td>
</tr>
<tr>
<td>3. Aesthetics</td>
</tr>
<tr>
<td>4. Personal Qualities</td>
</tr>
<tr>
<td>5. Creative Processes and Practices</td>
</tr>
<tr>
<td>6. Making Results Public</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career Development (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete development of career plan</td>
</tr>
<tr>
<td>2. Apply decision-making skills in selection of a career option</td>
</tr>
<tr>
<td>3. Analyze skills and abilities in a career option</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrated Learning (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate integration and application</td>
</tr>
<tr>
<td>2. Use academic knowledge and skills</td>
</tr>
<tr>
<td>3. Research, interpret, analyze, and evaluate information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Universal Foundation Skills (3a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic Skills</td>
</tr>
<tr>
<td>2. Thinking Skills</td>
</tr>
<tr>
<td>3. Personal Qualities</td>
</tr>
<tr>
<td>4. Interpersonal Skills</td>
</tr>
<tr>
<td>5. Technology</td>
</tr>
<tr>
<td>6. Managing Information</td>
</tr>
<tr>
<td>7. Managing Resources</td>
</tr>
<tr>
<td>8. Systems</td>
</tr>
</tbody>
</table>

#### POSSIBLE STANDARDS CONNECTIONS
- English Language Arts
- Languages Other than English
- Mathematics, Science, and Technology
- Health, Physical Education, and Family and Consumer Sciences
- Social Studies
- The Arts
# Arts/Humanities Sample Activities

<table>
<thead>
<tr>
<th>Sample Activities</th>
<th>CDOS 3b</th>
<th>CDOS 1</th>
<th>CDOS 2</th>
<th>CDOS 3a</th>
<th>ELA</th>
<th>LOTE</th>
<th>MST</th>
<th>H/PE/FCS</th>
<th>SS</th>
<th>ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Newsletter</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>2. Teen Curators</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>3. Making a Sundial</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>4. Community Services</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>5. Artistic Enterprise</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>6. Scene from a Play</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>7. Performance Publicity/Review</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>8. Art Gallery</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>9. Interdisciplinary Project</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>10. Music Appreciation Class</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

Possible Connecting Standards

- **ELA** = English Language Arts Standards
- **LOTE** = Languages Other than English Standards
- **MST** = Mathematics, Science, and Technology Standards
- **H/PE/FCS** = Health, Physical Education, and Family and Consumer Sciences Standards
- **SS** = Social Studies Standards
- **Arts** = The Arts Standards