

**NEW YORK STATE EDUCATION DEPARTMENT
MIDDLE LEVEL CAREER AND TECHNICAL EDUCATION
COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
DIGITAL LITERACY AND CITIZENSHIP CONTENT MODULE
UPDATED MAY 2023**

MODULE DESCRIPTION

As our society grows and changes,

3. COLLABORATING USING DIGITAL TOOLS

STUDENTS WILL:

- a) Use a variety of digital tools to create and revise an artifact relevant to learning goals
- b) Use appropriate digital tools to publish artifacts to a platform
- c) Effectively communicate with others using digital tools
- d) Collaborate with others using a variety of digital tools to create and revise an artifact

4. SAFETY ON THE INTERNET

STUDENTS WILL:

- a) Explain how actions in online spaces have consequences
- b) Understand how personal information can be compromised by methods of connectivity and storage of information
- c) Research and develop a plan to demonstrate how students can maintain a safe environment including the positive and negative impacts of implementing best security practices
- d) Describe actions to be taken to respond to security concerns using digital devices

5. DIGITAL FOOTPRINT

STUDENTS WILL:

- a) Describe how personal decision-making impacts a student's digital footprint
- b) Identify the benefits and consequences of being connected 24/7
- c) Identify the benefits and consequences that apply when creating a balance of online behaviors

6. CAREERS IN CYBERSECURITY

STUDENTS WILL:

- a) Explain roles and functions of individuals engaged in careers involving cybersecurity
- b) Investigate education, training requirements, and opportunities for career paths in cybersecurity fields
- c) Assess personal employability skills for careers in cybersecurity and evaluate personal suitability for such careers

ILLUSTRATIVE ACTIVITIES BY THEME MODULE

These activities are intended to serve as examples of how the content in this module could be tied to each of the six middle level themes.

CAREER AND COMMUNITY OPPORTUNITIES

CAREER RESEARCH PROJECT

Students will research careers in information technology using best research practices developed in this module. They will then develop computational artifacts to showcase their findings.

COMMUNICATION AND INTERPERSONAL RELATIONSHIPS

COMMUNICATION SCENARIOS

Given a communications scenario, students will determine the most articulate and safe way to communicate to the chosen group while ensuring privacy using best practices.

FINANCIAL AND CONSUMER LITERACY

BEST PRACTICES GUIDE

Students will design a best practices guide on how to protect personally identifiable information (PII) and finances when banking online or through an app in order to avoid negative consequences when using these tools in public and private spaces.

HEALTH, SAFETY, AND WELLNESS

CONNECTIVITY AND HEALTH

Students will collaborate and research the impact of 24/7 digital access and how that can impact their mental and physical health. Collaborative groups will create a digital artifact that provides strategies to create a balance of online behaviors.

PROBLEM SOLVING AND INNOVATION

INQUIRY-BASED INVESTIGATIONS

Students will engage in the problem-solving process by collecting and analyzing different sources and tools to determine credibility, effectiveness, and efficiency. Students will produce a digital artifact detailing the analysis.

SUSTAINABILITY

A SUSTAINABLE SCHOOL ENVIRONMENT

Students will research how to maintain a safe and sustainable learning environment. They will create an artifact that details best practices to create a sustainable school.

STANDARDS ADDRESSED

NEW YORK STATE CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES (CDOS) STANDARDS

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

STANDARD 3A: UNIVERSAL FOUNDATION SKILLS

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace

COMMON CAREER TECHNICAL CORE STANDARDS

CAREER READY PRACTICES

1. Act as a responsible and contributing citizen and employee
2. Apply appropriate academic and technical skills
3. Attend to personal health and financial well-being
4. Communicate clearly and effectively with reason
5. Consider the environmental, social, and economic impacts of decisions
6. Demonstrate creativity and innovation
7. Employ valid and reliable research strategies
8. Utilize critical thinking to make sense of problems and persevere in solving them
9. Model integrity, ethical leadership, and effective management
10. Plan education and career paths aligned to personal goals
11. Use technology to enhance productivity
12. Work productively in teams while using cultural global competence

NYS COMPUTER SCIENCE AND DIGITAL FLUENCY STANDARDS

CYBERSECURITY

- 4-6.CY.1: Explain why different types of information might need to be protected.
 - 7-8.CY.1: Determine the types of personal information and digital resources that an individual may have access to that needs to be protected.
 - 4-6.CY.2: Describe common safeguards for protecting personal information.
 - 7-8.CY.2: Describe physical, digital and behavioral safeguards that can be employed in different situations.
 - 4-6.CY.3: Describe trade-offs between allowing information to be public and keeping information private and secure.
 - 7-8.CY.3: Describe trade-offs of implementing specific security safeguards.
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DIGITAL LITERACY

- 4-6.DL.1: Type on a keyboard while demonstrating proper keyboarding technique.
- 7-8.DL.1: Type on a keyboard while demonstrating proper keyboarding technique, with increased speed and accuracy.
- 4-6.DL.2: Select appropriate digital resources.

RESOURCES

