NEW YORK STATE EDUCATION DEPARTMENT MIDDLE LEVEL CAREER AND TECHNICAL EDUCATION

SUSTAINABILITY THEME MODULE

UPDATED JUNE 2023

MODULE DESCRIPTION

This module introduces students to ways in which the environment is impacted by humans and their

ILLUSTRATIVE ACTIVITIES BY CTE CONTENT AREA

AGRICULTURAL EDUCATION

COMPOSTING SCHOOL FOOD WASTE

Students will conduct action research in the school cafeteria to determine the amount of food waste generated by students during lunch periods. Students will research methods for reducing food waste and for utilizing food waste through composting. Students can investigate the use of the compost in a school garden to grow vegetables to serve in the cafeteria.

BUSINESS AND MARKETING EDUCATION

SUSTAINABLE BUSINESS PRACTICES

Students will conduct research and prepare virtual brochures on sustainable business practices and how these practices attract new employees. Brochures can include profiles of local or national businesses that promote sustainability and show how these businesses infuse sustainability into daily work activities, training programs, reward systems, and operational practices and objectives. Students can share their brochures through the school intranet.

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

LIFECYCLE OF AN ELECTRONIC DEVICE

Students will research the material sourcing, development, life span, and disposal of the components of one piece of technology. Students will evaluate the effects and debate the positive and negative impacts of the device.

FAMILY AND CONSUMER SCIENCES EDUCATION

PRODUCT LIFE CYCLES

Students will identify a commonly used household item and investigate the full product lifecycle. They will include the source of the materials used to make the product, the usable life of the product, and

selection and care of textiles; and selection, cleaning, and disposal of tools and implements. Discuss ways the need for patient safety and disease control affects the environmental management decisions in a healthcare facility.

TECHNOLOGY EDUCATION

RENEWABLE ENERGY TECHNOLOGIES

Students will research technologies that promote renewable energy. Students design and build examples such as windmills, solar ovens, and photovoltaic models to demonstrate and test how renewable energy can be collected and used to produce power. Discuss the benefits and challenges of implementing these renewable energy technologies on a large scale to provide power to the community.

TRADE AND TECHNICAL EDUCATION

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The Environmental Protection Agency provides environmental science research, education, and assessment information. The mission of the EPA is to protect human the environment EPA has 10 regional offices across the country; Neowickis in Region 2 The Regional Environmental Education Coordination each area can provide information and resources about local environmental issues and EPp agrams.