Computer Literacy Application and Programing: Grades K-12

- Empower students to make safe, smart, and ethical decisions online.
- Utilize software including G-Suite (Docs, Sheets, Slides, Drive, etc.) and other Internet-based resources to provide opportunities to develop problem solving, innovation, collaboration, computational thinking and digital skills.
- Create opportunities for hands-on design and engineering using computer applications, robotics, human, digital and analog resources.
- Enable students to evaluate digital information for accuracy and reliability to create meaningful connections and conclusions.

**By the end of the school year, students in Grades K-2 will be able to:**

Understand and use technology systems.

Select and use applications effectively and productively.

Apply existing knowledge to generate new ideas, products, or processes.

Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.

Advocate and practice safe, legal, and responsible use of information and technology.

Identify and define authentic problems and significant questions for investigation.

Demonstrate an understanding of the role computers play in our lives now and in the future.

**By the end of the school year, students in Grades 3-5 will be able to:**

Understand and use technology systems.

Select and use applications effectively and productively.

Apply existing knowledge to generate new ideas, products, or processes.

Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.

Advocate and practice safe, legal, and responsible use of information and technology.

Identify and define authentic problems and significant questions for investigation.

Recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

Demonstrate an understanding of the role computers play in our lives now and in the future.

Use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

**By the end of the school year, students in Grades 6-8 will be able to:**

Understand and use technology systems.

Select and use applications effectively and productively.

Apply existing knowledge to generate new ideas, products, or processes.

Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

Advocate and practice safe, legal, and responsible use of information and technology.

Identify and define authentic problems and significant questions for investigation.

Recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

Demonstrate an understanding of the role computers play in our lives now and in the future.

Use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.

Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

Understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.