

ISTE STANDARDS

MIDDLE SCHOOL

EMPOWERED LEARNER

- Articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.
- Build networks and customize their learning environments in ways that support the learning process.
- Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
- Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

DIGITAL CITIZEN

- Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
- Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
- Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
- Manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

KNOWLEDGE CONSTRUCTOR

- Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
- Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
- Curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

INNOVATIVE DESIGNER

- Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- Develop, test and refine prototypes as part of a cyclical design process.
- Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

COMPUTATIONAL THINKER

- Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
- Collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.
- Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

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

CREATIVE COMMUNICATOR

- Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
- Create original works or responsibly repurpose or remix digital resources into new creations.
- Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
- Publish or present content that customizes the message and medium for their intended audiences.

GLOBAL COLLABORATOR

- Use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
- Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
- Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. Explore local and global issues and use collaborative technologies to work with others to investigate solutions.