

ISTE STANDARDS FOR STUDENTS - DIGITAL LITERACY 2016



SD72 Scope and Sequence



Emerging Developing Proficient

K-1 2-3 4-5

Empowered Learner

Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

- 1.a Students articulate and **set personal learning goals**, develop strategies leveraging technology to achieve them and reflect on the **learning process** itself to improve learning outcomes.
- 1.b Students build networks and customize their learning environments in ways that support the learning process.
- 1.c Students **use technology** to seek feedback that informs and improves their practice and to **demonstrate their learning** in a variety of ways..
- 1.d Students 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**

Digital Citizen

Students 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.

- 2.a Students cultivate and manage their **digital identity** and reputation and are aware of the **permanence** of their actions in the digital world.
- 2.b Students engage in **positive, safe, legal** and **ethical** behavior when using technology, including social interactions **online** or when using networked devices.
- 2.c Students demonstrate an understanding of and respect for the rights and obligations of **using and sharing** intellectual **property**.
- 2.d Students 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

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

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

Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

- 4.1 Students know and use a **deliberate design process** for generating ideas, testing theories, creating **innovative artifacts** or solving **authentic** problems.
- 4.2 Students select and use **digital tools** to plan and manage a design process that considers **design constraints** and **calculated risks**.

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4.3 Students develop, test and refine **prototypes** as part of a **cyclical** design process.

4.4 Students exhibit a tolerance for **ambiguity**, **perseverance** and the capacity to work with **open-ended problems**.

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Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

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

5.2 Students **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.

5.3 Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

5.4 Students understand how **automation** works and use algorithmic thinking to develop a **sequence** of steps to create and test **automated** solutions.

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Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

6.1 Students choose the appropriate **platforms** and **tools** for meeting the desired objectives of their creation or communication.

6.2 Students create original works or **responsibly repurpose** or remix digital resources into new creations.

6.3 Students **communicate complex ideas** clearly and effectively by creating or using a variety of **digital objects** such as **visualizations**, **models** or **simulations**.

6.4 Students publish or present content that **customizes** the message and medium for their intended audiences.

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Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

7.1 Students 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.

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

7.3 Students **contribute constructively** to project teams, **assuming various roles** and responsibilities to work effectively toward a common goal.

7.4 Students **explore local and global issues** and use collaborative technologies to work with others to **investigate solutions**.

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