

# ISTE STANDARDS FOR STUDENTS - DIGITAL LITERACY 2016



## SD72 Scope and Sequence



Emerging    Developing    Proficient

6-8

### 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**.


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**.

### 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.



### 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.



### 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**.

