

# 8th Grade

## 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 Students will develop technology strategies to achieve and reflect on learning goals to improve outcomes. **8.ET.EL.1**
    - 1 Set and communicate personal learning goals, use digital tools to share with others, and reflect on their learning. **8.ET.EL.1.1**
    - 2 Use a variety of digital tools to achieve their learning goals and justify the rationale for their selection. **8.ET.EL.1.2**
    - 3 Create a digital portfolio to share their work and receive feedback from peers. **8.ET.EL.1.3**
  - 2 With or without support, students build networks of experts and peers to enhance their learning. **8.ET.EL.2**
    - 1 Apply individually selected and school approved virtual learning environments to collaborate, present, and publish information. **8.ET.EL.2.1**
    - 2 Use collaborative technology to build a personal learning network. **8.ET.EL.2.2**
  - 3 Students improve learning by seeking feedback from others using digital tools and other resources to demonstrate learning in a variety of ways. **8.ET.EL.3**
    - 1 Evaluate a variety of digital tools and methods to effectively and efficiently gather and publish information. **8.ET.EL.3.1**
    - 2 Utilize digital communication tools to obtain feedback to improve the overall quality of the product. **8.ET.EL.3.2**
  - 4 Students demonstrate an understanding of how technology works, know how to independently troubleshoot, and are not afraid to take a risk in choosing and utilizing new or current technologies for learning. **8.ET.EL.4**
    - 1 Implement the use of keyed technology to produce a product in any learning environment. **8.ET.EL.4.1**
    - 2 Demonstrate the ability to locate and use documentation and online resources to help solve hardware/software problems. **8.ET.EL.4.2**
    - 3 Apply their knowledge and skills from existing technologies and devices to successfully use new technologies. **8.ET.EL.4.3**
    - 4 Demonstrate knowledge of a variety of multimedia tools to complete a task. **8.ET.EL.4.4**
-

## Computational Thinker

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

- 1 Students select appropriate technology to analyze data, create models, and problem-solve through the use of logical thinking. **8.ET.CT.1**
    - 1 Investigate and compare the digital tools used to analyze data and create models for problem solving. **8.ET.CT.1.1**
    - 2 Recommend and integrate applications that could be extended to other situations **8.ET.CT.1.2**
  - 2 Students use the computational thought process to represent data, deconstruct problems, identify key information, and formulate solutions. **8.ET.CT.2**
    - 1 Use data and patterns to design an efficient system to formulate solutions to test for intended outcomes. **8.ET.CT.2.1**
    - 2 Compare the effect one system has on another system. **8.ET.CT.2.2**
  - 3 Students will recognize basic concepts of automation including decomposition, abstraction, use algorithmic thinking, and pattern recognition. **8.ET.CT.3**
    - 1 Investigate coding efficiency for patterns such as loops and functions and implementation of abstraction such as variables and parameters. **8.ET.CT.3.1**
    - 2 Evaluate automation to the progression of technology and the impacts on society and careers. **8.ET.CT.3.2**
-

### **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.**

- 1 Students will demonstrate an understanding of the importance of creating and maintaining a positive online identity and the permanence and future impact of their online and offline decisions when using digital technology. **8.ET.DC.1**
    - 1 Analyze risks and consequences of sharing information online and advocate for the importance of creating and maintaining a positive digital footprint for self and others. **8.ET.DC.1.1**
    - 2 Examine the personal and societal positive and negative impacts of digital technology use. **8.ET.DC.1.2**
    - 3 Implement and advocate strategies to maintain personal safety and avoid online victimization of self and others. **8.ET.DC.1.3**
  - 2 Students will practice positive, safe, legal, and ethical behavior when using technology. **8.ET.DC.2**
    - 1 Critique external and internal Acceptable Use Policies or Terms of Use. **8.ET.DC.2.1**
    - 2 Advocate social rules of anti-bullying and cyberbullying to promote positive and healthy online communication, relationships, and mental health. **8.ET.DC.2.2**
    - 3 Connect how technology can have positive and negative impacts on personal, professional and community relationships. **8.ET.DC.2.3**
  - 3 Students demonstrate and promote respect for using and sharing the intellectual property of others and themselves. **8.ET.DC.3**
    - 1 Advocate for the proper use of intellectual property and implement in all subject areas. **8.ET.DC.3.1**
    - 2 Work with librarians and educators to demonstrate an understanding of how to add attribution to original works. **8.ET.DC.3.2**
  - 4 Students demonstrate an understanding of how personal data is collected, tracked, and used, how to maintain privacy, and how to safely share it online. **8.ET.DC.4**
    - 1 Investigate cybersecurity vulnerabilities and their personal, local, and global impacts. **8.ET.DC.4.1**
    - 2 Assess methods that online merchants collect information to target and market users. **8.ET.DC.4.2**
-

## Innovative Designer

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

- 1 With or without the use of technology, students can apply a design process to generate ideas, consider possible solutions, create a plan to solve a problem, and share their innovative ideas with others. **8.ET.ID.1**
    - 1 Apply and justify a design process to solve identified problems. **8.ET.ID.1.1**
  - 2 Students persevere when researching and solving open-ended problems and use trial-and-error strategies to test and refine prototypes. **8.ET.ID.2**
    - 1 Design and test prototypes to solve problems. **8.ET.ID.2.1**
    - 2 Critique and synthesize results of tests to refine prototypes. **8.ET.ID.2.2**
- 

## 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.**

- 1 Students evaluate and select a variety of platforms and tools to create products and communicate with others to appropriately complete tasks. **8.ET.CC.1**
    - 1 Evaluate the appropriateness of their chosen platform or tools before beginning and during the project, and after completion are able to justify their choice to an audience. **8.ET.CC.1.1**
    - 2 Evaluate and implement effective collaborative technology to manage interpersonal communication and information. **8.ET.CC.1.2**
  - 2 Students create original artifacts or responsibly remix or repurpose existing digital resources. **8.ET.CC.2**
    - 1 Create original artifacts that contain properly remixed or repurposed material. **8.ET.CC.2.1**
  - 3 Students select the appropriate medium and communicate clear, complex ideas through the use of visualizations for an intended audience. **8.ET.CC.3**
    - 1 Select and justify a tool to create a visualization to effectively explain and clarify content and ideas to an audience. **8.ET.CC.3.1**
-

## 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.**

- 1 Students will use collaborative digital tools to connect with people of different backgrounds, cultures, and points of view to examine local, national, and global issues. **8.ET.GC.1**
    - 1 Evaluate digital tools to learn from and collaborate with peers, experts, and community members with different perspectives and knowledge bases from a diversity of cultures and geographic regions. **8.ET.GC.1.1**
    - 2 Evaluate digital tools to connect with people of different backgrounds, cultures and different points of view. **8.ET.GC.1.2**
    - 3 Evaluate digital tools to gather information, create products, and present material regarding local, national, and global issues. **8.ET.GC.1.3**
  - 2 In a collaborative team, students will perform a variety of roles to complete a project or solve a problem using digital tools. **8.ET.GC.2**
    - 1 Seek and incorporate feedback from team members and users to refine a solution that meets user needs. **8.ET.GC.2.1**
    - 2 Collaborate using a variety of digital tools to present group findings or results and gather feedback to revise products for local or global audiences. **8.ET.GC.2.2**
    - 3 Identify and use a digital project management tool to track team performance on assigned tasks. **8.ET.GC.2.3**
-

## 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.**

- 1 Students employ appropriate research techniques to effectively locate credible resources to help them in the learning process. **8.ET.KC.1**
  - 1 Implement a plan for conducting a search of electronic resources for a given task. **8.ET.KC.1.1**
- 2 Students learn how to evaluate sources for currency, authority, accuracy, perspective and relevance. **8.ET.KC.2**
  - 1 Analyze online sources for accuracy, authority, perspective, relevance, and currency. **8.ET.KC.2.1**
  - 2 Evaluate digital sources based on the appropriateness to specific tasks. **8.ET.KC.2.2**
- 3 Students use a variety of strategies and digital tools to organize information and make meaningful connections. **8.ET.KC.3**
  - 1 Develop, analyze, and integrate a repertoire of strategies to apply new technologies to tasks. **8.ET.KC.3.1**
- 4 Students use digital tools to explore real world problems and issues and pursue potential solutions. **8.ET.KC.4**
  - 1 Recommend and integrate digital tools to explore real- world problems and potential solutions. **8.ET.KC.4.1**