

6-8

Empowered Learner: Students use technology to take an active role in their learning. EL

- 1 Leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.** EL1
 - A** Articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes. EL1.A
 - 1** Set personal learning goals and select and manage digital tools that will best support individualized learning ex.: use collaborative documents to revise and reflect on the writing process . EL1.A.1
 - 2** Reflect on successes, areas of improvement, and make necessary revisions to improve the learning over time ex.: using digital writing portfolio and reflection log/journal . EL1.A.2
 - B** Build networks and customize their learning environments in ways that support the learning process. EL1.B
 - 1** Collaborate with a network of self-selected global partners ex.: students, teachers, professionals, and the global community to customize and support the individual learning process. EL1.B.1
 - C** Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways. EL1.C
 - 1** Seek feedback from an authentic audience and from features embedded in digital tools ex.: share documents with teachers and peers asking for feedback on writing . EL1.C.1
 - 2** Use feedback to analyze data and make learning adjustments based on the feedback. EL1.C.2
 - D** Understanding the fundamental concepts of how to use technology technology operations . EL1.D
 - 1** Understand the fundamental use of technology tools to consider how to use technology to promote creativity, communication, collaboration, and critical thinking. EL1.D.1
 - 2** Choose and troubleshoot technology tools to suit purpose. EL1.D.2
 - 3** Transfer the knowledge of existing technology to explore new technologies. EL1.D.3
- 2 Apply the fundamental concepts of technology operations and demonstrate the ability to choose, use, and/or troubleshoot current technologies.** EL2

- A Demonstrate learning with the use of technology. **EL2.A**
 - 1 Evaluate the effectiveness of different digital tools to communicate information with multiple audiences. **EL2.A.1**
 - B Apply functions and concepts of technology operations; demonstrate the ability to choose, use and troubleshoot current technologies. **EL2.B**
 - 1 Choose functions and operations appropriate to their task and purpose. **EL2.B.1**
 - C Transfer knowledge to emerging technology. **EL2.C**
 - 1 Apply and adapt knowledge of existing technology to the modification-based use of new technologies. **EL2.C.1**
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Digital Citizen: Students manage their digital identity in a safe, positive, and proactive way. **DC**

- 1 **Recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world; act and model in ways that are safe, legal and ethical. **DC1****
 - A Cultivate and manage your digital identity and reputation, and be aware of the permanence of your actions in the digital world. **DC1.A**
 - 1 Recognize behaviors, habits, and actions that create, maintain, and influence both positive and negative digital identities, reputations, and footprints in the digital world. **DC1.A.1**
 - 2 Build awareness of public and permanent nature of online actions and the possible present and future consequences in personal, academic, and professional lives. **DC1.A.2**
 - B Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices. **DC1.B**
 - 1 Recognize and demonstrate responsible behaviors that are safe, ethical, and legal across a variety of devices, platforms, and settings while considering possible consequences for themselves and/or others. **DC1.B.1**
 - 2 Understand how to be respectful to others online while interacting, communicating, and collaborating and know strategies in order to avoid and/or combat cyberbullying. **DC1.B.2**
 - C Manage personal data to maintain digital privacy and security and are aware of data-collection technology used to track navigation online. **DC1.C**
 - 1 Distinguish between information that is public and personal/private and develop and utilize strategies to secure and protect personal/private data and user accounts. **DC1.C.1**
 - 2 Understand that data-collection technology is used to track online navigation and recognize and avoid online scams and phishing. **DC1.C.2**
 - 2 **Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. **DC2****
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- A Use information, media, and digital resources in a responsible manner. DC2.A
 - 1 Demonstrate acceptable use of the internet, information, media and digital resources, including social media according to user agreements, policies, and laws. DC2.A.1
- B Respect intellectual property rights. DC2.B
 - 1 Recognize and respect different intellectual property classifications, including those that are copyrighted, subject to fair use, public domain properties, and/or have creative commons licenses. DC2.B.1
- C Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. DC2.C
 - 1 Recognize and seek permission to use the intellectual property of others appropriately. DC2.C.1
 - 2 Use and share the intellectual property of others with proper citation and attribution elements. DC2.C.2

**Knowledge
Constructor: Students
use various digital tools
to find information and
make meaning. KC**

- 1 **Students critically curate a variety of resources using digital tools to construct knowledge. KC1**
 - A Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits. KC1.A
 - 1 Demonstrate effective digital search techniques ex.: filtering searches using advanced settings/tools, keyword/term choices, or phases to locate information or other resources to gather specific information on a subject or research topic. KC1.A.1
 - 2 Practice research strategies that outline a process for locating information digitally ex.: tools and effective search techniques . KC1.A.2
 - B Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. KC1.B
 - 1 Select a method, tool, or strategy to evaluate source s for credibility, relevance, authority, accuracy, and perspective. KC1.B.1
 - 2 Analyze digital information, media, data, and materials for credibility, relevance, authority, accuracy, and perspective. KC1.B.2
 - C Curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. KC1.C
 - 1 Combine various tools ex.: spreadsheet, database, saved files and methods ex.: concept mapping, flow charting and outlining software to classify information, observations, or experiments digitally. KC1.C.1
 - 2 Compile information from digital resources ex.: search engines, online periodical databases, virtual library/online catalogs, interactive video conferencing . KC1.C.2

2 Produce creative artifacts and make meaningful learning experiences from curated knowledge for themselves and others. KC2

A Produce creative artifacts. KC2.A

1 Demonstrate the ability to create new ideas/concepts or products with digital tools. KC2.A.1

B Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions. KC2.B

1 Build knowledge by generating and testing solutions for exploring real world issues using a variety of technology ex.: data collection tools, models, videos, podcast, simulations, forms . KC2.B.1

Innovative Designer: Students use a variety of technologies to design and create. ID

1 Use a variety of technologies to identify and solve authentic real-world problems. ID1

A Find authentic real-world problems in local and global contexts. ID1.A

1 Collaborate with others in and out of the classroom using digital tools to identify real-world problems and propose a solution that affects the local and global community. ID1.A.1

B Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. ID1.B

1 Demonstrate the ability to investigate and make sense of open-ended problems using digital tools and persevere in solving them. ID1.B.1

2 Use a variety of technologies within a design process to create new, useful and imaginative solutions. ID2

A Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. ID2.A

1 Explore and choose appropriate processes and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. ID2.A.1

B Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks. ID2.B

1 Investigate and use meaningful digital tools to plan and manage a design process that considers design constraints and calculated risks. ID2.B.1

C Develop, test and refine prototypes as part of a cyclical design process. ID2.C

1 Create, develop and test prototypes; understand and appreciate that failures are opportunities for growth and improvement. ID2.C.1

Computational Thinker: Students understand sequences and use them to develop

1 Develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. CT1

**solutions to
problems. CT**

- A** Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions. **CT1.A**
 - 1** Ask questions, gather data, create/observe abstract models, and think of different processes while finding solutions to real-world problems. **CT1.A.1**
- B** 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. **CT1.B**
 - 1** Solve problems and make decisions by collecting data or identifying relevant data sets, using digital tools ex.: sheets, surveys to analyze the data, and represent their findings through various ways. **CT1.B.1**
- C** Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving. **CT1.C**
 - 1** Break problems into parts, extract key information, and develop descriptive models to understand complex systems or lead problem solving tasks. **CT1.C.1**
- D** Understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions. **CT1.D**
 - 1** Use digital tools to collect data, conduct analysis, and discuss findings or possible solutions. **CT1.D.1**

2 Apply strategies for understanding and solving problems by using technological methods to develop and test solutions. CT2

- A** Use resources to collect, analyze, and represent data. **CT2.A**
 - 1** Use digital tools to ask questions to an audience and digitally collect data, and analyze the findings. **CT2.A.1**
- B** Deconstruct components to understand systems and facilitate problem-solving. **CT2.B**
 - 1** Use technology-assisted methods to break problems down into smaller, more manageable parts by finding patterns or other methods of decomposition. **CT2.B.1**
- C** Create and test automated solutions. **CT2.C**
 - 1** Use algorithm design to develop step-by-step instructions for solving a problem. **CT2.C.1**

**Creative
Communicator: Students
communicate clearly
and express themselves
with a variety of digital
tools. CC**

- 1 Communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals, audience and task. CC1**
 - A** Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. **CC1.A**
 - 1** Choose from available platforms and tools to meet the designated objectives of their creation or communication. **CC1.A.1**

- B** Create original works or responsibly repurpose and/or remix digital resources into new creations. **CC1.B**
 - 1** Create original works, or repurpose/remix digital resources into new creations, while demonstrating an understanding of digital citizenship ex.: intellectual property rights or copyrights . **CC1.B.1**
- C** Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. **CC1.C**
 - 1** Create or incorporate digital content to communicate complex ideas clearly and effectively to a variety of audiences. **CC1.C.1**

2 Publish and present content customized for their audience s , purpose, and task. CC2

- A** Publish and present content that customizes the message and medium for their intended audiences. **CC2.A**
 - 1** Publish or present original content to a predetermined audience that appropriately customizes the message and medium. **CC2.A.1**

Global Collaborator: Students use digital tools to connect with learners inside and outside of their classroom. GC

- 1 Use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. GC1**
 - A** 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. **GC1.A**
 - 1** Use digital tools and resources to connect and collaborate with authentic audiences from various backgrounds and cultures to broaden mutual understanding and learning, while using appropriate digital citizenship skills. **GC1.A.1**
 - B** Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. **GC1.B**
 - 1** Select and use digital tools in diverse collaborative teams within the classroom, assuming specific roles, responsibilities, and perspectives other than your own, to contribute effectively toward a common goal. **GC1.B.1**
 - C** Contribute to the exchange of ideas within and beyond the learning community. **GC1.C**
 - 1** Select and use digital tools in diverse collaborative teams outside the classroom, assuming specific roles, responsibilities, and perspectives other than their own, to contribute effectively toward a common goal. **GC1.C.1**
 - 2 Use digital tools to connect with a global network of learners and engage with issues that impact local and global communities. GC2**
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- A** Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints. **GC2.A**
 - 1** Use collaborative technologies to connect with others - including peers, experts, and community members - to learn about issues and problems or to gain diverse local and global perspectives. **GC2.A.1**
- B** Explore local and global issues and use collaborative technologies to work with others to investigate solutions. **GC2.B**
 - 1** Use collaborative technologies and assume roles within digital creations while maintaining digital citizenship within the team digital workspace to investigate and develop solutions to local and global issues. **GC2.B.1**