

**Secaucus
Board of
Education**

**Pre-K to 5 Educational
Technology**

Course Code: 0111, 0211, 0311, 0411, 0511

Curriculum and Instruction Department



Born on August 2016

Aligned to the New Jersey Core Curriculum Standards for Technology (2014)

Adopted by the Secaucus Board of Education on: August 25, 2016

District Equity Statement

The Board of Education directs that all students enrolled in the schools of this district shall be afforded equal educational opportunities in strict accordance with the law. No students shall be denied access to or benefit from any educational program or activity or from a co-curricular or athletic activity on the basis of the student’s race, color, creed, religion, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, gender identity or expression, socioeconomic status, or disability....The Board directs the Superintendent to allocate faculty, administrators, support staff members, curriculum materials, and instructional equipment supplies among and between the schools and classes of this district in a manner that ensures equivalency of educational opportunity throughout this district. The school district’s curricula in the following areas will eliminate discrimination, promote mutual acceptance and respect among students, and enable students to interact effectively with others, regardless of race, color, creed, religion, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, gender identity or expression, socioeconomic status, or disability:

1. School climate/learning environment
2. Courses of study, including Physical Education
3. Instructional materials and strategies
4. Library materials
5. Software and audio-visual materials
6. Guidance and counseling
7. Extra-curricular programs and activities
8. Testing and other assessments.

Excerpt from Secaucus Board of Education, Policy 5750, Edited September 2016

Course Modifications (ELLs, Special Education, Gifted and Talented)

The teacher will determine, with the assistance of school counselors, teacher assistant/aides, educational specialists, and/or special education teachers, what modifications will be made for their students. Such examples of modifications can include, but not be limited to:

- Extended time as needed
- Modification of tests and quizzes
- Preferential seating
- Alternative/Formative assessment (projects)
- Effective teacher questioning (ranging from simple recall to higher order critical thinking questions)
- Supplemental materials
- Cooperative learning
- Teacher tutoring
- Peer tutoring
- Differentiated Instruction

Content Area		Technology			
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
Strand		A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
P	How do I understand and use technology systems in a real world setting?	8.1.P.A.1	Use an input device to select an item and navigate the screen	Computers	Use the mouse to negotiate a simple menu on the screen.
		8.1.P.A.2	Navigate the basic functions of a browser.	Computers	Understand the basic functions of a browser, including how to open or close windows, tabs, and use the “back” key
	How do I select and use applications effectively and productively?	8.1.P.A.3	Use digital devices to create stories with pictures, numbers, letters and words.	Computers Media	Take a digital picture using different devices.
		8.1.P.A.4	Use basic technology terms in the proper context in conversation with peers and teachers (e.g., camera, tablet, Internet, mouse, keyboard, and printer).	Computers	Have a basic working vocabulary of common technology terms, such as digital camera, battery, screen, computer, Internet, mouse, keyboard, and printer.
		8.1.P.A.5	Demonstrate the ability to access and use resources on a computing device.	Computers	Know the “power keys” on a keyboard (e.g., ENTER, spacebar).
K-2	How do I understand and use technology systems in a real	8.1.2.A.1	Identify the basic features of a digital device and explain its purpose.	Computers	Same as above

	world setting?				
	How do I select and use applications effectively and productively?	8.1.2.A.2	Create a document using a word processing application.	Computers English/LA	Using a word processing application, write a paragraph about yourself
		8.1.2.A.3	Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.	Computers	Using several coding programs determine which tutorial provides greater success in what feature functionality
		8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).	Computers	Using Starfall or ABC Mouse follow learning path and use all educational game menus
		8.1.2.A.5	Enter information into a spreadsheet and sort the information.	Computers	Log student names into excel or sheets and sort them
		8.1.2.A.6	Identify the structure and components of a database.	Computers	Understand using Microsoft office for communication and collaboration.
		8.1.2.A.7	Enter information into a database or spreadsheet and filter the information.	Computers Math	Log test scores into excel or sheets and filter grades
3-5	How do I understand and use technology systems in a real world setting?	8.1.5.A.1	Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.	Science	Using a word processing application, write and format a report that organizes and defines the solution to this simple science problem or hypothesis. Clearly explain how it worked and insert a chart, graph or picture recording the results as evidence. (Science Fair) Resources: Google Docs, Google Sheets, Microsoft

					Word and/or Excel
How do I select and use applications effectively and productively?	8.1.5.A.2	Format a document using a word processing application to enhance text and include graphics, symbols and/ or pictures.			Same as above
	8.1.5.A.3	Use a graphic organizer to organize information about problem or issue.			Same as above Resource: Google Drawings , Bubble.U.S
	8.1.5.A.4	Graph data using a spreadsheet, analyze and produce a report that explains the analysis of the data.			Same as above Resources: Excel, Google Sheets, Create A Graph
	8.1.5.A.5	Create and use a database to answer basic questions.			Same as above
	8.1.5.A.6	Export data from a database into a spreadsheet; analyze and produce a report that explains the analysis of the data.			Same as above

Content Area		Technology			
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
Strand		B. Creativity and Innovation: <i>Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
P	How do I apply existing knowledge to generate new ideas, products, or processes?	8.1.P.B.1	Create a story about a picture taken by the student on a digital camera or mobile device.	Computers English/LA	Use Microsoft Word or Google Docs to create story from attached picture.
K-2		8.1.2.B.1	Illustrate and communicate original ideas and stories using multiple digital tools and resources.	Computers English/LA	Same as above
3-5	How do I create original works as a means of personal or group expression?	8.1.5.B.1	Collaborative to produce a digital story about a significant local event or issue based on first-person interviews.	English/LA	Interview (with a partner) a person of a chosen career to discuss their career choice and issues faced during their profession. Create a digital story about what you learned throughout this interview. Resources: Google Slides, IOS app Story Creator , Voicethread , UTellStory

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Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
Strand		C. Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
P	How can I interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media?	8.1.P.C.1	Collaborate with peers by participating in interactive digital games or activities.	Computers	Partner up students and use ABC Mouse or Starfall
K-2	How can I communicate information and ideas to multiple audiences using a variety of media and formats?	8.1.2.C.1	Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using various media formats such as online collaborative tools, and social media.	Computers	Kidzworld or Google Classroom assigned activities
3-5	How can I develop cultural understanding and global awareness by engaging with learners of other cultures? How can I Contribute	8.1.5.C.1	Engage in online discussions with learners of other cultures to investigate a worldwide issue from multiple perspectives and sources, evaluate findings and present possible solutions, using digital tools and online resources for all steps.	Social Studies English/LA	Participate in the EPals community by finding a class project that explores a global issue. Collaborate and communicate with your partner school from another country using Skype or another form of video conferencing. Create a digital story about what you learned throughout this process. Resources: Slidestory , Voicethread , Generator

	to project teams to produce original works or solve problems?				
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Content Area		Technology			
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
Strand		D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	How do I advocate and practice safe, legal, and responsible use of information and technology?	8.1.2.D.1	Develop an understanding of ownership of print and non-print information.	Computers	Students will identify ownership of websites and logos through browsing and Internet Safety videos.
3-5	How do I advocate and practice safe, legal, and responsible use of information and technology?	8.1.5.D.1	Understand the need for and use of copyrights.	Computers English/LA	Students complete the Copyright Kids Tutorial and Quiz , Cybary Mans Plagiarism Pages for Teachers
		8.1.5.D.2	Analyze the resource citations in online materials for proper use.	English/LA Science	Students look at examples of acceptable and unacceptable paraphrasing. Finally, students practice citing sources and creating a bibliography. Read, Write, Think: Cite Those Sources
	How do I demonstrate personal responsibility for lifelong learning?	8.1.5.D.3	Demonstrate an understanding of the need to practice cyber safety, cyber security, and cyber ethics when using technologies and social media.	Computers	Students will complete the iKeepSafe Lessons iKeepSafe Website
	How do I exhibit	8.1.5.D.4	Understand digital citizenship and	Computers	Students will complete the

	leadership for digital citizenship?		demonstrate an understanding of the personal consequences of inappropriate use of technology and social media.		iKeepSafe Lessons iKeepSafe Website
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Content Area		Technology			
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
Strand		E: Research and Information Fluency: <i>Students apply digital tools to gather, evaluate, and use information.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
P	How do I use the internet to answer questions?	8.1.P.E.1	Use the Internet to explore and investigate questions with a teacher's support.	Computers	Use various kid search engines like GoGooligans to answer questions
K-2	How do I use the internet to answer questions? How do I locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media? How can I evaluate and select information sources and digital tools based on the appropriateness for specific tasks?	8.1.2.E.1	Use digital tools and online resources to explore a problem or issue.	Computers	Same as above
3-5	How do I use the internet to answer	8.1.5.E.1	Use digital tools to research and evaluate the accuracy of, relevance to,		Is that a fact? Provide a playlist of sites for students

	<p>questions?</p> <p>How do I locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media?</p> <p>How can I evaluate and select information sources and digital tools based on the appropriateness for specific tasks?</p>		<p>and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.</p>		<p>to research using digital tools to confirm accuracy or inaccuracy of information provided. Read with sufficient accuracy and fluency to comprehend and support your position. Demonstrate knowledge by quoting accurately from the text and explaining what the text says explicitly to http://www.noodletools.com/temporarily-not-available/ support your position. Resources: Web Literacy, Noodle Tools: Wise Mapping</p>
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Content Area		Technology			
Standard		8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
Strand		F: Critical thinking, problem solving, and decision making: <i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	<p>How can I identify and define authentic problems and significant questions for investigation?</p> <p>How do I plan and manage activities to develop a solution or complete a project?</p> <p>How can I use technology to help me collect and analyze data to identify solutions and/or make informed decisions?</p> <p>How to I use technology to explore alternative solutions?</p>	8.1.2.F.1	Use geographic mapping tools to plan and solve problems.	Computers Science Social Studies	Use online interactive mapping tool such as Nat Geo. to locate areas and conduct research
3-5	How can I identify	8.1.5.F.1	Apply digital tools to collect, organize,	Science	Investigate how a potato ,

	<p>and define authentic problems and significant questions for investigation?</p> <p>How do I plan and manage activities to develop a solution or complete a project?</p> <p>How can I use technology to help me collect and analyze data to identify solutions and/or make informed decisions?</p> <p>How to I use technology to explore alternative solutions?</p>		<p>and analyze data that support a scientific finding.</p>		<p>much like a battery, can generate electrical current. Use online tools to collect data on voltage produced from potatoes, lemons and oranges. Use digital tools to organize the data logically and format with assigned fields/headings. Develop illustrations, photos or videos of the work to aid comprehension. Individually record observations in a shared file creating a group sampling from the class including number and type of “batteries” and amount of voltage they can produce. Interpret the results to suggest which item works best and what they could power. . Clearly identify needs or wants that include specified criteria for success and constraints, i.e. material, time, cost. Resources: Google Drive- Forms, Wise Mapping</p>
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Content Area		Technology			
Standard		8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.			
Strand		A. The Nature of Technology: Creativity and Innovation <i>Technology systems impact every aspect of the world in which we live.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	What are the characteristics and scope of technology?	8.2.2.A.1	Define products produced as a result of technology or of nature.	STEM	Discuss how these products were produced and their enhancements over time
		8.2.2.A.2	Describe how designed products and systems are useful at school, home and work.	STEM	Discuss how these technological advances have helped in all aspects of life
	What are the core concepts of technology?	8.2.2.A.3	Identify a system and the components that work together to accomplish its purpose.	STEM	Discuss all steps to achieve the goal
		8.2.2.A.4	Choose a product to make and plan the tools and materials needed.	STEM	Students will pick a product and type a small business plan
	What are the relationships among technologies and the connections between technology and other fields of study?	8.2.2.A.5	Collaborate to design a solution to a problem affecting the community.	STEM	Discuss certain problems and how technology can fix it
3-5	What are the	8.2.5.A.1	Compare and contrast how products made	English/LA	Prepare a written report

characteristics and scope of technology?		in nature differ from products that are human made in how they are produced and used.	Science	that compares and contrasts how products made in nature differ from products that are human made. Wisemapping for compare and contrast, Google Drawing , EasyBib
	8.2.5.A.2	Investigate and present factors that influence the development and function of a product and a system.	Computers Science	Research how a device of your choice has changed over time. Explain why it has changed and how it has changed for the better or worse. Present your finding and explain any advantages or disadvantages of this new device. Resources: Google Drive, Google Classroom
What are the core concepts of technology?	8.2.5.A.3	Investigate and present factors that influence the development and function of products and systems, e.g., resources, criteria and constraints.		Same as above
What are the relationships among technologies and the connections between technology and other fields of study?	8.2.5.A.4	Compare and contrast how technologies have changed over time due to human needs and economic, political and/or cultural influences.		Same as above
	8.2.5.A.5	Identify how improvement in the understanding of materials science impacts technologies.		Same as above

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Strand		B. Technology and Society: <i>Knowledge and understanding of human, cultural and societal values are fundamental when designing technological systems and products in the global society.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	How does our culture, society, economy and politics effects of technology?	8.2.2.B.1	Identify how technology impacts or improves life.	Computers Science Social Studies	Students will discuss different technologies available to help improve the environment and their community.
	What are the effects of technology on the environment?	8.2.2.B.2	Demonstrate how reusing a product affects the local and global environment.	Computers Science Social Studies	Students will learn about the differences between reuse, recycle or re-purpose.
	What is the role of society in the development and use of technology?	8.2.2.B.3	Identify products or systems that are designed to meet human needs.	STEM	Students will be introduced to algorithms, and how they impact our world.
	How has technology influenced history?	8.2.2.B.4	Identify how the ways people live and work has changed because of technology.	Computers Science Social Studies	Students will discuss different technologies available to us now and its advantages or disadvantages.
3-5	How does our culture, society, economy and	8.2.5.B.1	Examine ethical considerations in the development and production of a product through its life cycle.		Define ethical. Research a particular technology and examine any ethical

	politics effects of technology?				considerations made in its development. Present the life cycle of this product to your classmates using Google Slides .
	What are the effects of technology on the environment? What is the role of society in the development and use of technology?	8.2.5.B.2	Examine systems used for recycling and recommend simplification of the systems and share with product developers.	science	Have students find items in their homes used for recycling and share how they were recycled with the class. Recycle lesson can be used to introduce this topic.
		8.2.5.B.3	Investigate ways that various technologies are being developed and used to reduce improper use of resources.		Same as above
	How has technology influenced history? How does our culture, society, economy and politics effects of technology?	8.2.5.B.4	Research technologies that have changed due to society's changing needs and wants.		Create a slideshow on the history of technological advances. Resources: Google Slides, Prezi
		8.2.5.B.5	Explain the purpose of intellectual property law.	English/LA	Discuss the definition of intellectual property law. When would this law need to be in place. Determine whether certain texts are plagiarized. Write an informational piece about intellectual law and plagiarism and cite all sources using Easy Bib . Resources: Common Sense Media , Guide to Intellectual Property
	What are the effects of technology on the environment?	8.2.5.B.6	Compare and discuss how technologies have influenced history in the past century.	Computers	Create a digital book including text and illustrations about how technology has influenced

					history over the past century. Storyjumper (insert photos), Prezi , Nikola Tesla: BrainPop
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Standard		8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.			
Strand		C. Design: <i>The design process is a systematic approach to solving problems.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	What are the attributes of design?	8.2.2.C.1	Brainstorm ideas on how to solve a problem or build a product.	STEM	Students will type a list of solutions to a provided problem
		8.2.2.C.2	Create a drawing of a product or device that communicates its function to peers and discuss.	STEM	Use Photoshop for design
		8.2.2.C.3	Explain why we need to make new products.	Computers Social Studies	Discuss how and why businesses continue to make bigger and better things
	How do I apply engineering design principles?	8.2.2.C.4	Identify designed products and brainstorm how to improve one used in the classroom.	Computers	Discuss how to improve Makerbot 3-D printer
		8.2.2.C.5	Describe how the parts of a common toy or tool interact and work as part of a system.	Computers Science	Observe Makey Makey circuitry
	What is the role of troubleshooting, research and development, invention and innovation and experimentation in	8.2.2.C.6	Investigate a product that has stopped working and brainstorm ideas to correct the problem.	Computers	Change browser software to allow program to function correctly

	problem solving?				
3-5	What are the attributes of design?	8.2.5.C.1	Collaborate with peers to illustrate components of a designed system.	Computers STEM	With a partner, use SketchUp to create a 3D illustration of a designed system and label the components.
		8.2.5.C.2	Explain how specifications and limitations can be used to direct a product's development.	Science STEM	Collaborate in a discussion examining a fuel source (i.e. gas, electric, wind, solar, fire). Investigate what influences its development and use. Identify the resources needed to produce the fuel and explain how availability of resources affects people both here and in areas around the world. Write an informational text examining how the fuel is produced and limited both here and abroad. Resources: Online Drawing WhiteBoard , Creately Interactive Graphic Organizers , Kid News
		8.2.5.C.3	Research how design modifications have lead to new products.		Same as above
	How do I apply engineering design principles?	8.2.5.C.4	Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.	STEM Computers	Students decide upon a problem to evaluate solutions and use SketchUp or TinkerCad to model a solution with the best results. (Can be combined

					with 8.2.5.C.1)
		8.2.5.C.5	Explain the functions of a system and subsystems.		Same as above
	What is the role of troubleshooting, research and development, invention and innovation and experimentation in problem solving?	8.2.5.C.6	Examine a malfunctioning tool and identify the process to troubleshoot and present options to repair the tool.	STEM	Examine a tool of choice that you can troubleshoot and present options to repair the tool.
		8.2.5.C.7	Work with peers to redesign an existing product for a different purpose.	STEM	Redesign the tool chosen above to create a different purpose for the product.

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Strand		D. Abilities for a Technological World: <i>The designed world is the product of a design process that provides the means to convert resources into products and systems.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	How can I apply the design process?	8.2.2.D.1	Collaborate and apply a design process to solve a simple problem from everyday experiences.	STEM	Discuss a product or a constructed machine that will solve these problems. Use Tinkercad to design
	How do I use and maintain technological products and systems?	8.2.2.D.2	Discover how a product works by taking it apart, sketching how parts fit, and putting it back together.	STEM	Same as above
		8.2.2.D.3	Identify the strengths and weaknesses in a product or system.	STEM	Same as above
		8.2.2.D.4	Identify the resources needed to create technological products or systems.	STEM	Same as above
	How can I assess the impact of products and systems?	8.2.2.D.5	Identify how using a tool (such as a bucket or wagon) aids in reducing work.	STEM	Same as above
3-5	How can I apply the design process? How do I use and maintain technological products and	8.2.5.D.1	Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and tradeoffs to be considered.	Computers STEM	Identify problems that are solved by technology and hold an online discussion about what you have found. Resources: Google

systems?					Classroom, Know It All videos
	8.2.5.D.2	Evaluate and test alternative solutions to a problem using the constraints and trade-offs identified in the design process to evaluate potential solutions.	Science		Learning to Give Lesson : Comparing dirt and compost samples with a diagram. Students share knowledge about composting to diminish landfills.
	8.2.5.D.3	Follow step by step directions to assemble a product or solve a problem.	Computers STEM		Code.org tutorials and puzzles, 3D printing with Tinkercad
	8.2.5.D.4	Explain why human-designed systems, products, and environments need to be constantly monitored, maintained, and improved.	Science		Same as 8.2.5.D.2
How do I use and maintain technological products and systems?	8.2.5.D.5	Describe how resources such as material, energy, information, time, tools, people and capital are used in products or systems.	Computers		Research 3D printing and how it is used to make a product. How has this developed over time? How are people and economics a factor in its development? Create a 3D prototype of this invention using the 3D printer and TinkerCad and write an informative piece about what you learned about 3D printing.
	8.2.5.D.6	Explain the positive and negative effect of products and systems on humans, other species and the environment, and when the product or system should be used.	Science English/LA		Choose a product that has an impact on the environment and create a presentation on its positive and negative effects on humans and the environment. Resources: Haiku Deck , Prezi , Google

					Slides,
		8.2.5.D.7	Explain the impact that resources such as energy and materials used in a process to produce products or system have on the environment.		Same as above

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Strand		E. Computational Thinking: Programming: <i>Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to creating knowledge.</i>			
Grade Level bands	Essential Questions	Indicator	Indicator	Interdisciplinary Connections	Classroom Application(s)
K-2	How are computational thinking and computer programming used as tools during design and engineering?	8.2.2.E.1	List and demonstrate the steps to an everyday task.	STEM	Complete unplugged activity worksheet to describe instructions
		8.2.2.E.2	Demonstrate an understanding of how a computer takes input through a series of written commands and then interprets and displays information as output.	STEM	Use Code.com or Scratch.org to demonstrate understanding
		8.2.2.E.3	Create algorithms (a sets of instructions) using a predefined set of commands (e.g., to move a student or a character through a maze).	STEM	Same as above
		8.2.2.E.4	Debug an algorithm (i.e., correct an error).	STEM	Same as above
		8.2.2.E.5	Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).	STEM	Discuss terms throughout program usage

3-5	How are computational thinking and computer programming used as tools during design and engineering?	8.2.5.E.1	Identify how computer programming impacts our everyday lives.	Computers STEM	Find a guest speaker for the classroom at code.org or watch the introductory videos.
		8.2.5.E.2	Demonstrate an understanding of how a computer takes input of data, processes and stores the data through a series of commands, and outputs information.	Computers STEM	Students should complete the code.org tutorials at their own pace. Students create an animation story using Scratch . Brain Pop: Code Monkey
		8.2.5.E.3	Using a simple, visual programming language, create a program using loops, events and procedures to generate specific output.		Same as above
		8.2.5.E.4	Use appropriate terms in conversation (e.g., algorithm, program, debug, loop, events, procedures, memory, storage, processing, software, coding, procedure, and data).		Same as above