Wallenpaupack Area School District
Planned Course Curriculum Guide

Department
Technology

Name of Course
Computers K-2

Course Description:
The computing curriculum introduces computer science as a creative, collaborative, and engaging discipline to children in kindergarten through second grade. Students will learn about algorithms and programming, computing systems, networks and the Internet, data and analysis, and impacts of computing, while developing strong practices and dispositions.

Revision Date: January 2023

Wallenpaupack Area School District Curriculum	
COURSE: Technology	**GRADE/S: K-2**
UNIT 1: Coding	**TIMEFRAME: 4 Class Periods**

CSTA STANDARDS:

- 1A-AP-08
- 1A-AP-09
- 1A-AP-10
- 1A-AP-11
- 1A-AP-12
- 1A-AP-13
- 1A-AP-14
- 1A-AP-15

UNIT OBJECTIVES (SWBATS):

- Explore coding and spark an interest in coding
- Learn that Coding is a set of instructions that computers use to complete a task
- Understand the educational and career concepts that support students learning to code
- Practice some simple coding using free online resources
- Research and report on coding programs and resources available for varied skill levels and goals
- Evaluate your new knowledge of coding and plans to implement a coding program

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

- Osmo
- Puzzlets
- Code and Go Mouse
- Kibo
- Code-a-Pillar
- Hour of Code
- Cubetto

- **ANCHOR VOCABULARY:** Network, Internet, Data, Analysis, Algorithms and Programing, Computing, Code, Object, Operator, Properties, Sequence

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Teacher Observation
- Progress Monitoring

EVIDENCE OF MASTER:

- Teacher Observation
- Coding Checklist

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

- Students will be able to preview the project and associated support materials before instruction begins
- Students will be aware of the key ideas / outcomes of the project.
- Students will be able to play with the Coding projects, so they understand how they work.
- Teachers will encourage students to collaborate with peers

- As students become efficient in collaborating with peers, teacher will provide less support and encourage independence.
- Teacher will recognize that learning sometimes happens through productive struggle. Intervening too quickly may limit their ability to think through the problem.
- While a little struggle is effective, too much may result in a student giving up. If the struggle becomes too much, have the student take a break and do something else for a little while.
- Teacher will use the "least to most prompting" strategy. Begin with the least amount of support the student requires and move towards more as needed.

RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.):

- Code.org, coding manipulatives

RESOURCE SPECIFIC VOCABULARY:

- Network, Internet, Data, Analysis, Algorithms and Programing, Computing, Code, Object, Operator, Properties, Sequence

Wallenpaupack Area School District Curriculum	
COURSE: Technology	**GRADE/S: K-2**
UNIT 2: Digital Citizenship	**TIMEFRAME: 1-2 Class Periods**

CSTA STANDARDS:

- 1A-NI-04
- 1A-IC-16
- 1A-IC-17
- 1A-IC-18

UNIT OBJECTIVES (SWBATS):

- 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.
- Understand that technology is imperfect
- Use technology resources for communication of thoughts, ideas, and stories
- Comply with acceptable use policy

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

- Common Sense Education Digital Citizenship Curriculum

ANCHOR VOCABULARY: Online, Website, Private

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Lesson Quiz
- Pause and Think
- Reflection

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

- Teacher Observation

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

- Students will be aware of the key ideas / outcomes of the project.
- Teachers will encourage students to collaborate with peers
- As students become efficient in collaborating with peers, teacher will provide less support and encourage independence.
- Teacher will recognize that learning sometimes happens through productive struggle. Intervening too quickly may limit their ability to think through the problem.
- While a little struggle is effective, too much may result in a student giving up. If the struggle becomes too much, have the student take a break and do something else for a little while.
- Teacher will use the “least to most prompting” strategy. Begin with the least amount of support the student requires and move towards more as needed.

RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.):

Common Sense Education Digital Citizenship Curriculum

RESOURCE SPECIFIC VOCABULARY:

Online, Website, Private

Wallenpaupack Area School District Curriculum	
COURSE: Technology	**GRADE/S: K-2**
UNIT 3: Mechanics	**TIMEFRAME: Continuous**

CSTA STANDARDS:

- 1A-CS-01
- 1A-CS-02
- 1A-CS-03
- 1A-DA-05

UNIT OBJECTIVES (SWBATS):

- Students will understand the basic operations and concepts of technology

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

- Use headphones, mouse, keyboard, monitor, touchscreen
- Perform operations: locating and using the menu, logging on/off, restarting
- Identify and use parts of a keyboard
- Use appropriate sitting position and hand placement
- Networking: logging on and off, recognizing appropriate programs, maximizing, minimizing, closing out of programs
- Recognize and use individual log ins and passwords
- Demonstrate responsible use of technology and equipment.
- Launch, navigate and quit programs
- Utilize menu options and commands: open, print, save
- Launch internet and access websites
- Use teacher-selected Internet resources to view online information
- Use LMS and SSO for classroom content

ANCHOR VOCABULARY: headphones, mouse, keyboard, monitor, touchscreen, menu, logging on/off, restart, shut down, maximize, minimize, launch, quit, open, print, save, website, Internet

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Teacher observations
- Checklists

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

- Teacher observation

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

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- Teacher will use the “least to most prompting” strategy. Begin with the least amount of support the student requires and move towards more as needed.

RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.):

- LMS
- SSO
- Teacher selected apps and websites

RESOURCE SPECIFIC VOCABULARY:

Headphones, mouse, keyboard, monitor, touchscreen, menu, logging on/off, restart, shut down, maximize/minimize, launch, quit, close, open, print, save, website, internet

Wallenpaupack Area School District Curriculum	
COURSE: Technology	**GRADE/S: K-2**
UNIT 4: Projects and Problem Solving	**TIMEFRAME: Continuous**

CSTA STANDARDS:

- 1A-DA-05
- 1A-DA-06
- 1A-DA-07
- 1A-IC-16
- 1A-IC-17
- 1A-IC-18

UNIT OBJECTIVES (SWBATS):

- Students will use technology productivity and communication tools to enhance learning, increase productivity, and promote creativity.
- Students will select and use appropriate technology research, problem-solving and decision making tools.

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

- Navigate a program/application by using either the menus or icons.
- Use text, paint, and/or drawing tools to create simple documents
- I can use devices to complete learning activities such as puzzles, matching, and logical thinking.
- Recognize and discuss ways to share information electronically
- Use electronic devices as a writing tool.
- Explore different types of media (text, audio, images, video, etc.)
- Manipulate digital images.
- Create simple presentations using text and graphics.
- Explore technology tools for individual writing, communication, and publishing (Ex. Word, PowerPoint, Keynote, Pages, Skype.)
- Use multimedia resources such as interactive software and web sites
- Use standard formatting toolbars in word processing, presentation and drawing software
- Identify the best tool to communicate a concept, idea, or information
- Navigate the internet with a web browser
- Use search engines and selection of resources on the internet
- Use the internet to go to teacher-selected sites
- Use computer and technology resources as a learning tool
- Use of a prepared list of web links to gather information from resources
- Select an application based on appropriateness to the task
- Recognize that technology can be used to solve problems and make informed decisions
- Use a step-by-step process to solve a problem

ANCHOR VOCABULARY:

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Teacher Observation

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

- Teacher Observation

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

- Students will be aware of the key ideas / outcomes of the project.
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RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.):

- LMS
- SSO
- Teacher selected apps and websites

RESOURCE SPECIFIC VOCABULARY:

Presentation, text, graphics, key words, electronic search, publishing, multimedia, formatting, reliable/unreliable, graphic organizer, slide show, data, ownership, rubric, copyright