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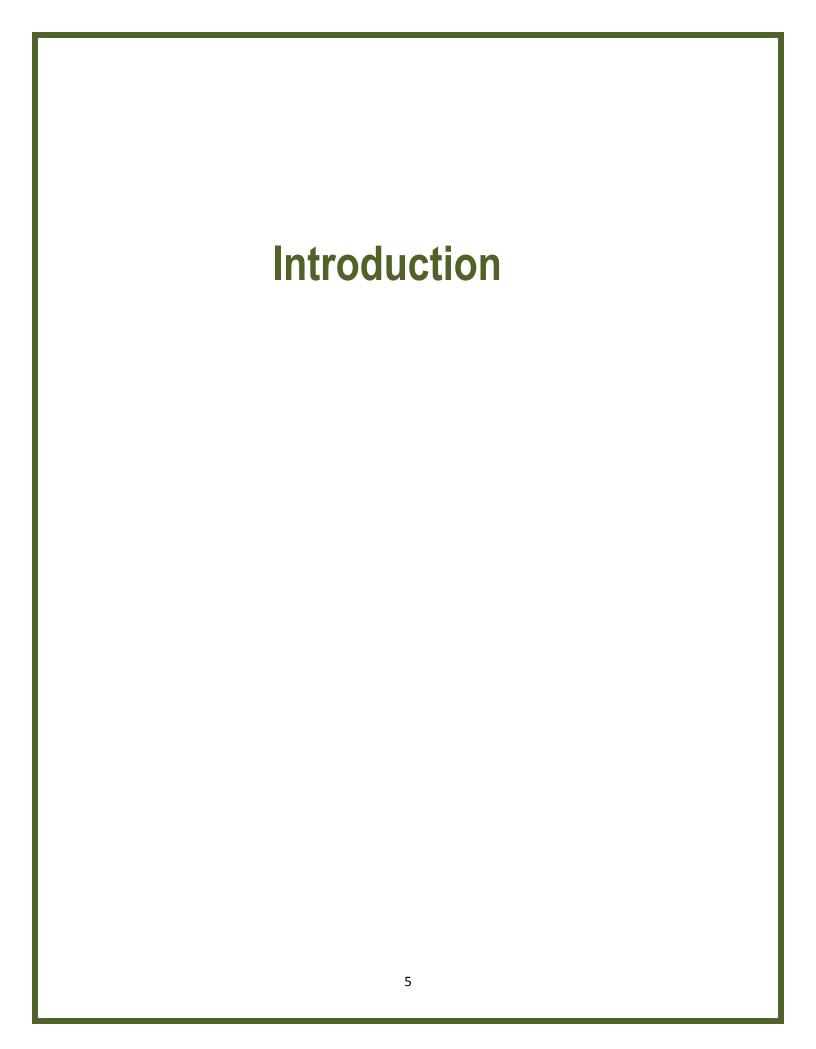
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District Mission Statement

The Westampton School District, in partnership with its Community, shall do whatever it takes to ensure that every child achieves or exceeds proficiency in the current New Jersey Student Learning Standards.

Be open! Be creative! Be accountable!

Vision Statement

To create a climate where the Community and District support the instructional process by incorporating an effective, comprehensive communication system that incorporates the whole child as its driving force involving parents, staff, and the Community by utilizing appropriate data to challenge the students and teachers to maximize each student's level of achievement.

Curriculum and Instruction Vision Statement

Westampton Township School District's Office of Curriculum and Instruction is committed to supporting, implementing, and supervising K – 8 curriculum that is rigorous, meaningful, differentiated, culturally responsive, and academically challenging to ensure that students receive high-quality instruction that promotes excellence and high expectations, prepares all students for the rigors of high school and postsecondary education and produces dynamic student achievement and lifelong learners.

Technology Education Philosophy

Computer Literacy encompasses the collection, organization and presentation of information. Students are empowered by the use of computers, software and related technologies. It is expected that students will utilize these powerful tools for learning, productivity, communication, creativity, entertainment and research. Due to the rapid, ongoing advances in technology, students will be required to hone previously mastered as well as acquire new skills to continue to take full advantage of technology.

The technology program of the Westampton School District acknowledges these rapid changes by providing a flexible framework to incorporate technological advancements. To accomplish this, the program focuses on generic proficiency, not attached to specific software or hardware.

Instruction of these skills will be integrated into educational methods and used to support and enhance other curricula. This will be done with formal, direct instruction from grades 1 to 8. In addition to specialized instruction, students will have opportunities within the regular classroom, the computer labs and the media center to further blend technology into their total school environment.

It is the goal of the Westampton School District to offer a comprehensive educational technology program. Our intent is to provide all students with the necessary skills as well as an understanding of the role of technology in our lives.

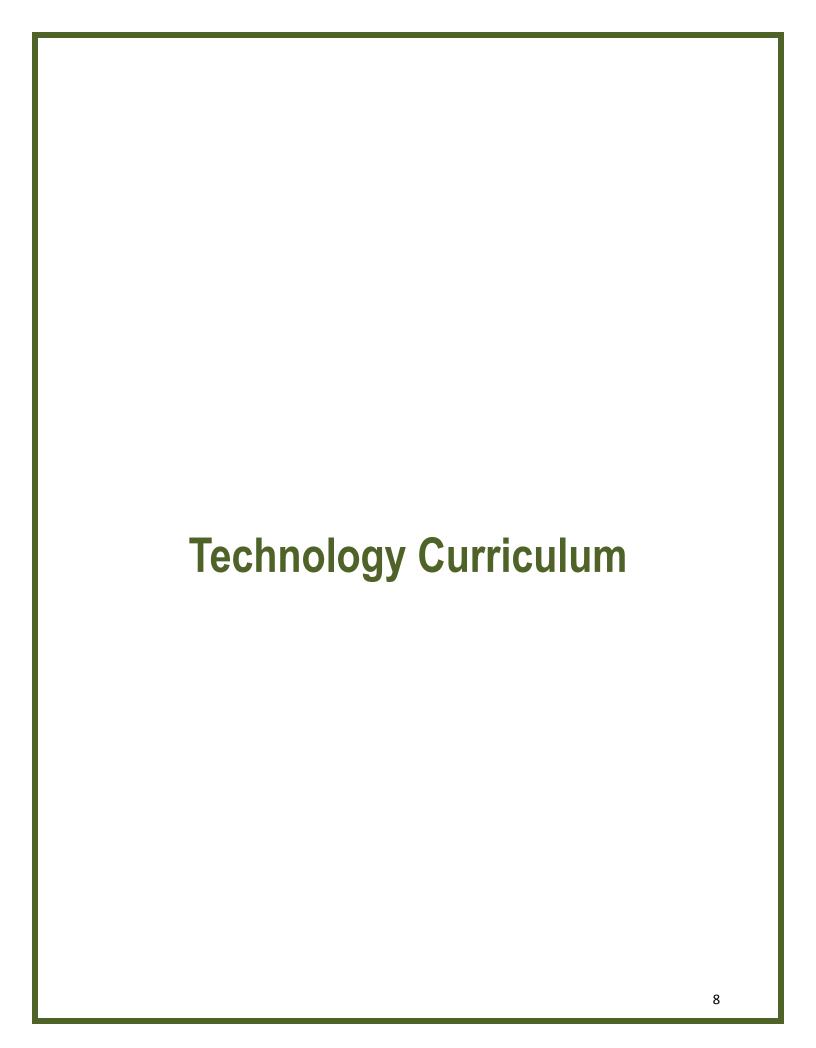
Curriculum Guide

The Technology Curriculum is developed to reflect the mission and vision of the Westampton Township School District. This curriculum incorporates the 2014 New Jersey Student Learing Standards.

The curriculum format and template is largely influenced by Understanding by Design, Expanded 2nd Edition by Grant Wiggins and Jay McTighe. As recognized experts in curriculum and instructional design, we thought it was essential to utilize their work as the foundation for building a comprehensive, practical, and user-friendly curriculum.

This curriculum guide includes instructional objectives, teaching strategies, learning activities, assessments, and resources, tools which should be utilized throughout the school year by teachers to ensure that all students receive a rigorous, standards-based instruction. However, since the backward design model acknowledges that there are many "entry points" to writing curriculum and designing units, teachers have opportunity throughout the school year to include additional information in all areas of the curriculum to ensure that there is alignment, clarity, and rigor throughout the curriculum. This curriculum is organized into broad units that can be incorporated into interdisciplinary lessons. The technology teacher can use this curriculum to support curriculum efforts in other areas, while developing within student, the capacity for computer literacy. The goal of the units is to start in Kindergarten with basic fundamentals of computing, keyboarding, word processing, web browsing, and other technological tools. These skills are addressed at each grade level with the goal of full mastery by the end of eighth grade.

This curriculums use of individual units, without a direct scope and sequence in the curriculum is to allow for flexibility in the technology classrooms as well as the subject areas. The ability to integrate these skills into the classrooms, as well as, develop new units is the key benefit to this approach to the curriculum. Therefore, this guide is ongoing and will continue to evolve as technology changes, research changes and classroom practice determines new ways to teach students and increase student achievement. This document allows for ongoing dialogue and contributions by teachers and administrators to ensure that this guide provides the best education possible for all students.



Scope and Sequence

Grades K - 4:

Kindergarten:

Marking Period 1

- Parts of the computer/Vocabulary {computer, mouse, keyboard, printer, icon, application, monitor, headphones, volume control, left button, right button, double click, scroll wheel} (8.1.2.A.1; 8.2.2.E.5)
- Compare different digital devices and their advantages vs disadvantages (8.1.2.A.3)
- Define products produced by technology or nature (8.2.2.A.1)
- Mouse skills click, click & drag, drag & drop (8.1.2.A.4)
- Basic computer troubleshooting (+CRP2)

Marking Period 2

- Mouse Skills (8.1.2.A.4, +CRP2, +CRP11)
- Introduce Keyboarding (+CRP2, +CRP11)
- Hour of Code (8.2.2.E.3, 8.2.2.E.4, *ISTE 1c,1d, 3d, 4b, 4d, 5a, 5d)
- Basic computer troubleshooting (+CRP2)

Marking Period 3

- Unplugged coding, robots (*ISTE 4a,4c, 4d)
- Digital to draw (8.1.2.B.1, +CRP11)
- Google Earth (8.1.2.F.1)
- Basic computer troubleshooting (+CRP2)

- Connect unplugged coding to computers (*ISTE 1c,1d, 3d, 4b, 4d, 5a, 5d)
- Keyboarding (+CRP2, +CRP11)
- Locate and open programs (+CRP2, +CRP11)

• Basic computer troubleshooting (+CRP2)

Grade 1:

Marking Period 1

- Parts of the computer/Vocabulary {Review computer, mouse, keyboard, printer, icon, application, monitor, headphones, volume control, left button, right button, double click, scroll wheel} (8.1.2.A.1; 8.2.2.E.5)
- Keyboarding (+CRP2, +CRP11)
- Mouse Skills click & drag, drag & drop (8.1.2.A.4, +CRP2, +CRP11)
- Basic computer troubleshooting (+CRP2)

Marking Period 2

- Keyboarding (+CRP2, +CRP11)
- Microsoft Word locate, open & close files.(8.1.2.A.2, +CRP2, +CRP11)
- Understanding of print v non-print (8.1.2.D.1)
- Hour of Code (8.2.2.E.3, 8.2.2.E.4, *ISTE 1c,1d, 3d, 4b, 4d, 5a, 5d)
- Basic computer troubleshooting (+CRP2)

Marking Period 3

- Word Processing save v save as (8.1.2.A.2, +CRP2, +CRP11)
- Unplugged coding, robots (8.2.2.C.5, *ISTE 4a,4c, 4d)
- Internet Safety (+CRP12)
- Explore a problem or issue (8.1.2.E.1)
- Basic computer troubleshooting (+CRP2)

- Word Processing save v save as (8.1.2.A.2, +CRP2, +CRP11)
- Basic computer troubleshooting (+CRP2)
- Digital to draw (8.1.2.B.1, +CRP11)

Grade 2:

Marking Period 1

- Parts of the computer/Vocabulary {Review computer, mouse, keyboard, printer, icon, application, monitor, headphones, volume control, left button, right button, double click, scroll wheel, menu, desktop, print, open, close, program, folder, file, save, cut, copy, paste, network, text box, drop down menu, minimize, maximize, restore, undo.} (8.1.2.A.1; 8.2.2.E.5)
- Keyboarding (+CRP2, +CRP11)
- Microsoft Word -.(8.1.2.A.2, 8.2.2.A.2, +CRP2, +CRP11)
- Selecting and applying various applications (8.1.2.A.2, 8.2.2.D.1)
- Basic computer troubleshooting (+CRP2)

Marking Period 2

- Keyboarding (+CRP2, +CRP11)
- Microsoft Word locate, open & close files, control x, control v, control c, right click.(8.1.2.A.2, 8.2.2.A.2, +CRP2, +CRP11)
- Selecting and applying various applications (8.1.2.A.2, 8.2.2.D.1)
- Hour of Code (8.2.2.E.3, 8.2.2.E.4, *ISTE 1c,1d, 3d, 4b, 4d, 5a, 5d)
- Basic computer troubleshooting(+CRP2)

- Microsoft Word locate, open & close files, control x, control v, control c, right click.(8.1.2.A.2, 8.2.2.A.2, +CRP2, +CRP11)
- Selecting and applying various applications (8.1.2.A.2, 8.2.2.D.1)
- Digital Citizenship (8.1.2.D.1, 8.1.5.D.3, 8.2.2.D.3)
- Unplugged coding, robots (8.2.2.C.5, *ISTE 4a,4c, 4d)
- Internet Safety (8.1.2.D.1, 8.1.5.D.3, 8.2.2.D.3)
- Basic computer troubleshooting(+CRP2)
- Informational Research non-fiction text (8.1.2.D.1)
- Google Earth (8.1.2.F.1)

Marking Period 4

- Microsoft Word locate, open & close files, control x, control v, control c, right click.(8.1.2.A.2, 8.2.2.A.2, +CRP2, +CRP11)
- Selecting and applying various applications (8.1.2.A.2, 8.2.2.D.1)
- Basic computer troubleshooting(+CRP2)
- Digital to draw (8.1.2.B.1, +CRP11)
- Identify how technology impacts or improves life (8.2.2.B.1, 8.2.2.B.4)
- Identify the resources needed to create technological products and systems (8.2.2.D.4)

Grade 3:

Marking Period 1

- Parts of a computer/Technology Vocab.{keyboard, home row, shift, spacebar, backspace, tab, keys, enter, cursor, text box, drop down menu, minimize, maximize, restore, recycle bin, text, font, font size, font color, numbered list, bullets, bold, center, underline, print preview, show, hide, World Wide Web, search box, URL, database, website, homepage, link, plagiarism, copyright, multimedia, graphic, clipart, design, layout, graphic box, header/footer, spreadsheet, row, column, cell, worksheet, chart, graph, data} (8.2.5.E.2)
- Microsoft Word (8.1.5.A.2, 8.2.5.E.2)
- Basic computer troubleshooting(+CRP2)

Marking Period 2

- Microsoft Word (8.1.5.A.2, 8.1.2.A.3, 8.2.5.E.2)
- Cybersafety (8.1.5.D.3)
- Assess the credibility and accuracy of digital content (8.1.5.D.4)
- Use digital tools to research and evaluate. (8.1.5.E.1)
- Microsoft PowerPoint copyright rules (8.1.5.D.1)
- Basic computer troubleshooting(+CRP2)
- Hour of Code (8.2.2.E.3, 8.2.2.E.4, 8.2.5.E.1, *ISTE 1c,1d, 3d, 4b, 4d, 5a, 5d)

- Unplugged coding, robots (*ISTE 4a,4c, 4d)
- Google Earth/Google Maps/Geoguessr (8.1.2.F.1)

Marking Period 4

- Connect unplugged coding to computers (*ISTE 4a,4c, 4d)
- Microsoft PowerPoint copyright rules (8.1.5.D.1)
- Microsoft Excel (8.1.5.A.4)
- Introduce Mystery Hangouts (8.1.5.C.1, 8.1.5.B.1)
- Basic computer troubleshooting (+CRP2)

Grade 4:

Marking Period 1

- Parts of a computer/Technology Vocab.{keyboard, home row, shift, spacebar, backspace, tab, keys, enter, cursor, text box, drop down menu, minimize, maximize, restore, recycle bin, text, font, font size, font color, numbered list, bullets, bold, center, underline, print preview, show, hide, World Wide Web, search box, URL, database, website, homepage, link, plagiarism, copyright, multimedia, graphic, clipart, design, layout, graphic box, header/footer, spreadsheet, row, column, cell, worksheet, chart, graph, data, sum, sort, system, subsystem, design, engineer, troubleshoot, simulation, reuse, environmental impact} (8.2.5.E.2)
- Internet Safety/Digital Citizenship/Appropriate Searching (8.1.5.D.1, 8.1.5.D.3, 8.1.5.D.4)
- Introduce Mystery Hangouts (8.1.5.C.1, 8.1.5.B.1)
- Microsoft Word (8.1.5.A.2, 8.1.2.A.3, 8.2.5.E.2)
- Basic computer troubleshooting (+CRP2)

Marking Period 2

- Microsoft PowerPoint copyright rules (8.1.5.A.3, 8.1.5.D.1, 8.1.5.E.1)
- Microsoft Excel (8.1.5.A.4)
- Mystery Hangouts (8.1.5.C.1, 8.1.5.B.1)
- Hour of Code (8.2.2.E.3, 8.2.2.E.4, 8.2.5.E.1 8.2.5.E.2, *ISTE 1c,1d, 3d, 4b, 4d, 5a, 5d)
- Basic computer troubleshooting (+CRP2)

- Unplugged coding, robots (8.2.5.A.1-4, 8.2.5.B.1-6, 8.2.5.C.1-4, 8.2.5.D.1-3, 8.2.5.E.2, *ISTE 4a, 4c, 4d)
- Google Earth/Google Maps/Geoguessr (8.1.2.F.1)

- Connect unplugged coding to computers(*ISTE 4a,4c, 4d)
- Google Docs
- Google Slides
- Mystery Hangouts (8.1.5.C.1, 8.1.5.B.1)
- Basic computer troubleshooting(+CRP2)
- Google Earth/Google Maps/Geoguessr (8.1.2.F.1)
- *ISTE International Society for Technology in Education
- +CRP Career Ready Practices

Curriculum Guide

Grades K-1 Content Area: Technology

Computer Basics Suggested Sequence: Topic #1

NJSLS:

- 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
- 8.1.2.A.3 Compare common uses of at least two different digital applications identify the advantages and disadvantages of using each.
- 8.1.2.D.1 Develop an understanding of ownership of print and non-print information.
- 8.2.2.A.1- Define products produced as a result of technology or of nature
- 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue
- 8.2.2.E.5 Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What is a network?
- What is the Internet?
- How does a computer work?
- How can I make use of a computer?
- What is the correct behavior for using hardware and software?
- How to identify and care for basic computer components, including the keyboard, mouse, monitor, speakers, and printer?
- How each basic computer component can be classified as an input device or an output device?
- What are the symbols of technology and how are they used?
- What is the symbol for printing and how is it used?

Enduring Understandings:

 Understanding proper use and care for the computer and other technological tools help students to appreciate the value of technology is our lives.

Knowledge, Skills, and Instructional Objectives:

Students will ...

- Understand the concept of being online.
- Use a username and password to log on to a network.
- Understand correct behavior involved in using a computer.
- Identify components of a computer and their uses.
- Become familiar with the concept of a processor ("the brain").
- Learn to properly care for a computer.
- Learn to identify input, output, and processing devices.
- Understands that symbols (icons) can represent functions of technology.

Instructional Materials/Resources: Handouts Models Computer Lab Smart board/projector Internet Application software Suggested Vocabulary: Mouse, keyboard, printer, icon, application, monitor, headphones, volume control Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

- Provide visual and tactile reference to computer hardware.
- Model program operations
- Provide paper handouts
- Utilize web resources/activities

Curriculum Guide

Grades K-1 Content Area: Technology

Extension Strategies/Activities:

 Teach a classmate how to click on icons on a computer

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in **CRP2.** Apply appropriate academic and technical skills.school, and during play).

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Performance Task
- Teacher observation
- Student participation

Curriculum Guide

Grades K-1 Content Area: Technology

Mouse Basics	Suggested Sequence:
	Topic #2

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
- 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.
- 8.1.2.A.2 Use technology terms in daily practice.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What a pointer is and how a pointer device (or mouse) is used?
- What is the difference between the left and right side of the mouse?
- What is the function of the right side of the mouse?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- What objects look like and how to distinguish them
- To select items, one at a time.
- To change from one selection to another
- To double-click an item
- How to highlight and pressing enter
- To use a mouse
- To move objects (drag and drop an item) from one location to another
- To distinguish between the right and left side of the mouse
- To use scroll wheel to move up or down on a page

Instructional Materials/Resources:

Mouse Keyboard Internet

Scholastic Keys programs

Kids Pix

Suggested Vocabulary:

Mouse, left button, right button, double click, scroll wheel

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Complete "select, drag and double click" activity
- Computer lab and independent work
- Modeling

Extension Strategies/Activities:

Experienced students teach classmates

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Teacher Observation of individuals and groups
- Student successfully copies and pastes graphics
- Use of the mouse to access a variety of programs

Curriculum Guide

Grades K-1 Content Area: Technology

Introduction to Keyboarding Suggested Sequence: Topic # 4

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
- 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate
- 8.2.2.A.1 Describe how technology products, systems, and resources are useful at school, home, and work.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How to locate all of the letters of the alphabet on the computer keyboard?
- How to change case of letters on the computer keyboard?
- How to locate all of the numbers on the computer keyboard?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- The relationship between pressing keys on the keyboard and seeing letters on the screen
- To identify and key the letters of the alphabet.
- To change the case of letters of the alphabet.

Instructional Materials/Resources: • MS Word, Type To Learn 4 MS Word, Type To Learn 4 Suggested Vocabulary: Keyboard, home row, shift, spacebar, backspace, tab, keys, enter, cursor Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

- Modeling
- Complete activities from the Read, Write and Type program.
- Practice typing words in list on word processor

Extension Strategies/Activities:

• Advancement on Type to Learn

Modification Strategies/Activities:

- As per IEP/504
- · More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Printed certificates from Read, Write and Type
- Student work
- Teacher Observation of individuals

Curriculum Guide

Grades K-1 Content Area: Technology

Visual Mapping Basics Suggested Sequence: Topic #5

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.
- 8.1.2.A.2 Use technology terms in daily practice.
- 8.1.2.F.1 Use mapping tools to plan and choose alternate routes to and from various locations.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

 How to use the basic concepts of visually organizing ideas and the components of visual mapping software

Enduring Understandings:

 Students' ability to understand and use visual mapping software and applications will assist in their ability to organize and present ideas.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- To identify the basic components of visual mapping software.
- To understand the concept of focus and learns to identify it.
- To begin to understand visual mapping software as a way to group ideas.

Instructional Materials/Resources: Kidspiration program Google Earth/Google Maps Internet Mapping Apps Technology: Computers, keyboard, mouse

Recommended Instructional Activities:

- Model using graphic organizing software to complete a simple task.
- Demonstrate assigned mapping tasks using Kidspiration templates and activities.
- Use Google Earth to identify and demonstrate concept of distance in visual format.

Extension Strategies/Activities: • Design a map using technology • As per IEP/504 • More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task: Teacher observation Student participation Student work Rubric

Curriculum Guide

Grade 2 Content Area: Technology

Computer Basics Suggested Sequence: Topic #1

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
- 8.1.2.A.2 Use technology terms in daily practice.
- 8.2.2.A.1 Describe how technology products, systems, and resources are useful at school, home, and work.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What is a computer disk and drive?
- How does a computer read and write data?
- How to access saved files?
- What is the symbol for printing and how is it used?

Enduring Understandings:

 Understanding proper use and care for the computer and other technological tools help students to appreciate the value of technology is our lives.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- The basic concepts of data storage devices.
- Describe how technology products are use
- Open files, software programs and save files
- Utilize special function keys (e.g., shift, backspace, delete, enter)
- · Technology terms.

Instructional Materials/Resources:

- Handouts
- Models
- Computer Lab
- Smart board/projector
- Internet
- Application software

Suggested Vocabulary:

Keyboard, mouse, monitor, printer, disk, system unit, icon, menu, desktop, print, open, close, program, folder, file, save

Technology:

Computer, mouse, keyboard

Recommended Instructional Activities:

- Provide visual and tactile reference to computer hardware.
- Model program operations
- Provide paper handouts
- Utilize web resources/activities

Modification Strategies/Activities:

More time allotted for assignments as needed

Extension Strategies/Activities:

Teach classmates how to save files

Cross-curricular Connections/Standards:

- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

- Oral response
- Printed response/student work
- Teacher Observation

As per IEP/504

Curriculum Guide

Grade 2 Content Area: Technology

Computer Navigation Suggested Sequence: Topic #2

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.
- 8.1.2.A.2 Use technology terms in daily practice.
- 8.1.2.C.1 Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools
- 8.2.2.G.1 Describe how the parts of a common toy or tool interact and work as part of a system.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How are basic computer concepts, such as using the desktop, working with files and folders useful to users?
- How has dropdown menus and general window controls make technology more accessible?

Enduring Understandings:

 Navigation tools are convenient ways for users to access and manipulate various computer software, programming, and applications.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- To identify and open files and folders.
- To navigate file structures and to use the recycle bin or trash to delete files
- To use text boxes to enter free-form information.
- To use dropdown menus to make a selection
- To use window controls to close, maximize, minimize, restore, and resize windows.

To select appropriate digital tools to complete a task

Instructional Materials/Resources:

- Handouts
- Models
- Computer Lab
- Smart board/projector
- Web resources
- Application software
- Internet
- Microphone
- Webcam
- Mouse
- keyboard

Suggested Vocabulary:

Disk drive, network, access, file, folder, text box, drop down menu, menu, minimize, maximize, restore

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Provide visual and tactile reference to computer hardware.
- Model program operations
- Provide paper handouts
- Utilize web resources/activities

Extension Strategies/Activities:

Design a common toy or tool

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A**.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

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Grade 2 Content Area: Technology

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Oral response
- Printed response/student work
- Teacher Observation

Curriculum Guide

Grade 2 Content Area: Technology

Introduction to Keyboarding Suggested Sequence: Topic # 3

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and Disadvantages
- 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate
- 8.2.2.A.1 Describe how technology products, systems, and resources are useful at school, home, and work

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How to locate all of the letters of the alphabet on the computer keyboard?
- How to change case of letters on the computer keyboard?
- How to locate all of the numbers on the computer keyboard?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- The relationship between pressing keys on the keyboard and seeing letters on the screen
- To identify and key the letters of the alphabet.
- To change the case of letters of the alphabet.
- To identify and key the numbers on the keyboard.
- Concept of home row keys and proper hand placement

Instructional Materials/Resources:

- Handout keyboard charts
- Type to Learn program
- Dance Mat Typing website

Suggested Vocabulary:

Keyboard, home row, shift, spacebar, backspace, tab, keys, enter, cursor

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Complete activities from the Type to Learn program.
- Modeling
- Complete activities from online resources such as http://www.bbc.co.uk/schools/typing/

Extension Strategies/Activities:

• Type a short piece of writing (publishing)

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Progress charts from Type to Learn
- Teacher Observation of individuals

Curriculum Guide

Grade 2 Content Area: Technology

Word Processing Basics

Suggested Sequence: Topic #4

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.2 Use technology terms in daily practice.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
- 8.1.2.A.4 -Create a document with text using a word processing program.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

How to practice basic word processing skills by inputting text, moving the cursor, adding spaces, erasing typed information, saving, and printing.

Enduring Understandings:

Basic word processing skills is essential for students to maniptulate computer programs and application.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- How to open a word processing program.
- To create a new document
- To use the cursor.
- How to save a file.
- How to close a file.
- How to open a file.
- How to print a file.
- How to exit a word processing program.
- To type a numbered list
- To type document in paragraph form.

Instructional Materials/Resources:

- Word Processing software (Primary)
- Handout/printed material
- Smart board/projector
- Microsoft Word

Suggested Vocabulary:

Text, font, font size, font color, numbered list, print,

Shift key, spacebar, spell check, bulleted list

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Modeling of task
- Follow multi-step instruction
- Teacher generated word processing task

Extension Strategies/Activities:

Publish a piece of writing

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- 9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Printed response/student work
- **Teacher Observation**
- Rubric

Curriculum Guide

Grade 2 Content Area: Technology

Internet Research	Suggested Sequence:
	Topic #5

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.A.2 Use technology terms in daily practice
- 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.
- 8.1.2.D.1 Model legal and ethical behaviors when using both print and non-print information by citing resources.
- 8.2.2.G.2 Explain the importance of safety in the use and selection of appropriate tools and resources for a specific purpose.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What are the basic concepts about the Internet and the World Wide Web, such as using a web page and website, following links, and differentiating between the Internet and the World Wide Web?
- How to identify and use URLs to research information online, create and use bookmarks, and use the navigation buttons?

Enduring Understandings:

 Technology use can have positive or negative impact on both users and those affected by their use.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- The difference between a web page and a website.
- To browse the World Wide Web by following a series of links.
- To use a browser to find and view information online.
- To use the back and forward buttons to navigate through web pages.
- Begin to explain importance of copyright
- Explain importance of safely using computer hardware and how to select the appropriate computer tool

Instructional Materials/Resources:	Suggested Vocabulary:
Handouts	World Wide Web, search box, URL, database,
Internet access	website, homepage, link, webpage
Smartboard/projector	Technology:
	Computer, keyboard, mouse

Recommended Instructional Activities:

- Complete the "Basic Components" activity from Learning.com.
- Complete the "Browsing and URL's" activity from Learning.com.
- Microsoft Excel teacher generated activities.
- · Microsoft Explorer teacher generated activities.

Extension Strategies/Activities: • Complete web quests • As per IEP/504 • More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task

• Web quest; rubric; teacher observation of individuals and groups

Curriculum Guide

Grade 2 Content Area: Technology

Data Collection, Analysis and Communication Suggested Sequence: Topic #6

NJSLS:

- 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively.
- 8.1.2.E.1 Use the Internet to explore and investigate questions with a teacher's support.
- 8.1.2.C.1 Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools.
- 8.1.2.B.1 Illustrate and communicate original ideas and stories using digital tools and media-rich resources.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
- 8.2.2.D.1 Collect and post the results of a digital classroom survey about a problem or issue and use data to suggest solutions.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What is a spreadsheet programs and what are worksheets, cells, rows, columns, and cell addresses?
- How do you navigate tables and enter data?

Enduring Understandings:

 Spreadsheets are valuable to everyday users, when there is a proficient understanding of its use.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- To identify and name the components of a spreadsheet, including worksheet, cell, row, and column.
- The concept of a cell.
- Concepts of rows and columns, including number and letter labels.
- That a cell location name is based on the cell's row and column.
- To enter data in individual cells.
- To produce appropriate chart or graph

Instructional Materials/Resources:	Suggested Vocabulary:
Microsoft exel	Spreadsheet, row, column, cell, worksheet,
Computer Lab	chart
Smartboard/projector	Technology:
Internet	Computer, keyboard, mouse
Scanner	

Recommended Instructional Activities:

- Creating graphs and charts
- Adding data to spreadsheet cells
- Modeling
- Following multi-step instruction
- Post results to class wiki or blog
- Share information with other classes

Extension Strategies/Activities: • Advanced spreadsheets • Advanced spreadsheets • As per IEP/504 • More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- 9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

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- Projects
- Teacher Observation of individual and groups Student created documents

Curriculum Guide

Grade 2 Content Area: Technology

Visual Mapping Basics	Suggested Sequence: Topic #7
NUOLO	

NJSLS:

8.1.2.F.1Use mapping tools to plan and choose alternate routes to and from various locations.

Big Ideas:

A computer is an adaptable tool for accessing information and using digital tools in generating solutions and making decisions.

Essential Questions:

 How to use the basic concepts of visually organizing ideas and the components of visual mapping software

Enduring Understandings:

 Students' ability to understand and use visual mapping software and applications will assit in their ability to organize and present ideas.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- To identify the basic components of visual mapping software.
- To understand the concept of direction
- To begin to understand visual mapping software as a way to visualize distance

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Instructional Materials/Resources:	Suggested Vocabulary:
Google map, Google Earth	Graphic organizer, linking, icon, symbol
	Technology:
	Computer, keyboard, mouse
	_

Recommended Instructional Activities:

Locate specific places, addresses or landmarks using Google Maps/Google Earth

Extension Strategies/Activities:	Modification Strategies/Activities:
 Design a map 	As per IEP/504
	 More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A**.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Teacher observation
- Student participation
- Student work
- Rubric

Curriculum Guide

Grade 2 Content Area: Technology

Problem Solving and Decision Making

Suggested Sequence: Topic #8

NJSLS:

- 8.2.2.B.1 Brainstorm and devise a plan to repair a broken toy or tool using the design process.
- 8.2.2.B.2 Investigate the influence of a specific technology on the individual, family, community, and environment.
- 8.2.2.C.1 Demonstrate how reusing a product affects the local and global environment.
- 8.2.2.F.1 Identify the resources needed to create technological products and systems.
- 8.2.2.G.1 Describe how the parts of a common toy or tool interact and work as part of a system.
- 8.2.2.G.2 Explain the importance of safety in the use and selection of appropriate tools and resources for a specific purpose.

Big Ideas:

Using design process and digital tools to generate solutions and make decisions

Essential Questions:

- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations/experiences?
- How can the design process help to develop an understanding of a variety of tools and systems?

Enduring Understandings:

- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- The design process is a systematic approach to solving problems

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- To collaborate with students in another class using electronic tools
- Explain the importance of recycling and how it affects local and global environments
- Identify resources used to create technological products
- Explain the importance of safety in the use of technology tools

Instructional Materials/Resources:

Toys

Digital tools

Suggested Vocabulary:

Design, product, problem, solution

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Illustrate a story using digital tools
- Use online resources to explore a global problem (e.g., hunger)
- Communicate using digital tools.

Extension Strategies/Activities:

• Create a digital story for younger students

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- 9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Teacher observation
- Student participation
- Student work
- Rubric

Curriculum Guide

Grade 3 Content Area: Technology

Keyboarding Basics	Suggested Sequence:
	Topic #1

NJSLS:

8.1.4.A.1 - Demonstrate effective input of text and data using an input device.

8.1.4.A..5 - Determine the benefits of a wide range of digital tools by using them to solve problems

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What is the role of the cursor?
- How to delete text by using the Backspace or Delete key?
- How to use the arrow keys to move the cursor and how to use the Tab key to create large spaces?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- Proper posture for keyboarding
- To identify touch keys.
- To type basic punctuation (without using the Shift key).
- To type number row keys.
- To type numbers without looking at the keyboard.
- To understands reach keys.
- To continue using the enter/return key and backspace/delete key.

Student will gain:

- Additional experience keying letters and learns to form words.
- Additional familiarity with the placement of keys on the keyboard.

Instructional Materials/Resources: Type to Learn 4 Keyboard mouse Monitor Suggested Vocabulary: Keyboard, home row, shift, spacebar, backspace, tab, keys, enter, cursor Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

Type to Learn activities.

Extension Strategies/Activities:

• Advance on Type to Learn

Modification Strategies/Activities:

- As per IEP/504
- · More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- 9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Keyboarding Test from Type to Learn
- Teacher Observation of individuals and groups.

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Grade 3 Content Area: Technology

Computer Navigation Basics	Suggested Sequence: Topic #2
N.101.0	

NJSLS:

- 8.1.4.A.1 Demonstrate effective input of text and data using an input device.
- 8.1.4.A.5 Determine the benefits of a wide range of digital tools by using them to solve problems

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How do I navigate through program menus and to recognize and use symbols, properties, and online Help.
- How do I identify software groups, choose task-appropriate software, and create and work with files and file formats?

Enduring Understandings:

 Navigation tools are convenient ways for users to access and manipulate various computer software, programming, and applications.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- To navigate through program menus.
- To use toolbars.
- To use online help and mouse over text.
- To start and exit programs.
- To create, name, save, print, and close files.
- To identify software groups by function.
- To select software according to its appropriateness to a task.
- To identify and work with file formats.

Students will be able to:

- Understand the connection between program menu icons and toolbar buttons.
- Explore software programs.

Instructional Materials/Resources:	Suggested Vocabulary:
Handouts	Disk drive, network, access, file, folder, text box, drop
Models	down menu, menu, minimize, maximize, restore,
Computer Lab	recycle bin
Smart board/projector	Technology:
Web resources	Computer, keyboard, mouse
Application software	

Recommended Instructional Activities:

- Provide visual and tactile reference to computer hardware.
- Model program operations
- Provide paper handouts
- Utilize web resources/activities

Extension Strategies/Activities:

Teach classmates how to navigate programs

Modification Strategies/Activities:

- As per IEP/504
 - More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

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Grade 3 Content Area: Technology

Suggested Assessments:

- Oral response
- Printed response/student work
- Teacher Observation

Curriculum Guide

Grade 3 Content Area: Technology

Computer Basics Suggested Sequence: Topic #3

NJSLS:

- 8.1.4.A.1 Demonstrate effective input of text and data using an input device.
- 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program.
- 8.1.4.A.4 Create a simple spreadsheet, enter data, and interpret the information.
- 8.1.4.A.5 Determine the benefits of a wide range of digital tools by using them to solve problems

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- use basic technology vocabulary.
- use basic features of an operating system such as accessing and exiting programs, identifying and selecting a printer.
- use basic computer icons.
- input and access text and data, using appropriate keyboarding techniques or other input devices.
- setup and maintain computer files.

Instructional Materials/Resources:	Suggested Vocabulary:
Handouts	Keyboard, mouse, monitor, printer, disk, system
Models	unit, icon, menu, desktop, print, open, close,
Computer Lab	program, folder, file, network drive
Smart board/projector	Technology:
Application software	Computer, keyboard, mouse

Recommended Instructional Activities:

- Direct instruction
- Modeling of performance task
- Collaborative activity
- Independent analysis

Extension Strategies/Activities:

• Teach classmates computer basics

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- 9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

- Oral response
- Printed response/student work
- Teacher Observation

Curriculum Guide

Grade 3 Content Area: Technology

Word Processing Basics Suggested Sequence: Topic #4

NJSLS:

- 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program.
- 8.1.2.A.3 Discuss the common uses of computer applications and hardware and identify their advantages and Disadvantages

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- · How to open a word processing program.
- To create a new document
- To use the cursor.
- To save a file
- To close a file.
- To open a file.
- Print a file.
- To exit a word processing program.
- To select text.
- To change font size.
- To change font style by applying bold, italic, and underline formatting.
- To use the cut, copy, and paste commands.
- To insert clipart.
- To create bulleted or numbered lists.

Recommended Instructional Activities:

Smart board/projector

- Modeling of task
- Follow multi step instruction
- Project example
- Direct instruction
- Microsoft Office teacher generated activities.

Extension Strategies/Activities: • Advanced word processing • Modification Strategies/Activities: • As per IEP/504 • More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

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Grade 3 Content Area: Technology

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

Oral Response

Printed response/student work

Teacher observation

Rubric

Test

Curriculum Guide

Grade 3 Content Area: Technology

Web Browsing Basics Suggested Sequence: Topic #5

NJSLS:

- 8.1.4.D.1 Explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.
- 8.1.4.D.2 Analyze the need for and use of copyrights.
- 8.1.4.D.3 Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology.
- 8.1.4.E.1 Use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions.
- 8.1.4.E.2 Evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How to use keywords and categories in search engines. It also teaches privacy issues to consider when providing information on the World Wide Web?
- How to identify and use URLs to research information online, create and use bookmarks, and use the navigation buttons?

Enduring Understandings:

 Technology use can have positive or negative impact on both users and those affected by their use.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- To perform outline searches using search engines.
- To perform both real text and keyword searches.
- To perform category searches to find information.
- To determine the success of a search
- To recognize the privacy issues involved with providing personal information on web pages.

Instructional Materials/Resources:

Computer Lab Internet Explorer

Handouts

Smartboard/Proctor

Suggested Vocabulary:

World Wide Web, search box, URL, database, website, homepage, link, webpage, plagiarism, copyright

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Complete the "Keyword Searches" activities.
- Microsoft Explorer teacher generated activities.
- Modeling of task
- Direct Instruction

Extension Strategies/Activities:

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards

Suggested Assessments:

Web guests

- Performance Task
- Web quest
- Rubric
- Teacher Observation of individuals and groups

Curriculum Guide

Grade 3 Content Area: Technology

Presentation Basics	Suggested Sequence:
	Topic #6

NJSLS:

- 8.1.4.A.3 Demonstrate effective input of text and data using an input device.
- 8.1.4.B.1 Produce a media-rich digital story about a significant local event or issue based on first-person interviews
- 8.1.4.E.1 Investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps
- 8.1.4.E.2 Evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How can presentation software be used to tell stories and present ideas and information?
- How to identify a story's sequence and view slides and slide shows in presentation software?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- That presentation software is used to make slide shows on a computer.
- That a slide show is made up of a series of slides.
- To navigate through a slide show.
- To add multiple slides to a presentation.
- To choose a specific slide layout.
- To add a specific background design to slides.
- To add a footer to each slide.
- To use slide preview and other views to evaluate work progress and final product.

Instructional Materials/Resources:

- Computer Lab
- Multimedia software
- Smart board/projector
- MS PowerPoint

Suggested Vocabulary:

Multimedia, graphic, clipart, design, layout, design, text box, graphic box, header/footer

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Modeling of task
- Follow multi-step instruction
- Project example
- Direct Instruction

Extension Strategies/Activities:

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

Advanced presentation components

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A**.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

Student group activity

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Student individual work Rubric		

Curriculum Guide

Grade 3 Content Area: Technology

Spreadsheet Basics Suggested Sequence: Topic # 7

NJSLS:

- 8.1.4.A.4 -. Create a simple spreadsheet, enter data, and interpret the information.
- 8.1.4.F.1 Select and apply digital tools to collect, organize, and analyze data that support a scientific finding.
- 8.2.4.D.1 Analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses .

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What is a spreadsheet programs and what are worksheets, cells, rows, columns, and cell addresses?
- How to navigate in tables and enter data?

Enduring Understandings:

 Spreadsheets are valuable to everyday users, when there is a proficient understanding of its use.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- To identify and name the components of a spreadsheet, including worksheet, cell, row, and column.
- The concept of a cell.
- The concepts of rows and columns, including number and letter labels.
- That a cell location name is based on the cell's row and column.
- To enter data in individual cells.
- To select and generate a graph or chart from spreadsheet data.
- Analyze data collated to support scientific research

Instructional Materials/Resources:

- MS Excel
- Computer Lab
- Smartboard/projector
- Kids Zone Graphs

Suggested Vocabulary:

Spreadsheet, row, column, cell, worksheet,

chart, graph, data

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- · Teacher generated Microsoft Excel activities.
- Creating graphs and charts
- Adding data to spreadsheet cells

Advanced spreadsheet design

Cross-curricular Connections/Standards:

- Modeling
- Following multi-step instruction

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

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Extension Strategies/Activities:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A**.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

- Proiects
- Teacher Observation of individual and groups.

Curriculum Guide

Grade 4 Content Area: Technology

Computer Basics Suggested Sequence: Topic #1

NJSLS:

- 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program.
- 8.1.4.A.4 Create a simple spreadsheet, enter data, and interpret the information.
- 8.1.4.F.1 Select and apply digital tools to collect, organize, and analyze data that support a scientific finding.
- 8.2.4.G.1 Examine a malfunctioning tool and use a step-by-step process to troubleshoot and present options to repair the product .
- 8.2.4.G.2 Explain the functions of a system and subsystems.
- 8.4.2.G.3 Evaluate the function, value, and aesthetics of a technological product, system, or environment from the perspective of the user and the producer.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- To use basic technology vocabulary.
- To use basic features of an operating system such as accessing and exiting programs, identifying and selecting a printer.
- To use computer icons.
- To input and access text and data, using appropriate keyboarding techniques or other input devices.
- To setup and maintain computer files.
- To logon and log off different network accounts with user name and password
- To recognize a problem with the hardware or software and how to close and reboot.
- Identify which input tools are most useful for certain tasks
- Identify ways to improve upon technology design

Instructional Materials/Resources:

Handouts

Models

Computer Lab

Smart board/projector

Application software

Suggested Vocabulary:

Keyboard, mouse, monitor, printer, disk, system unit, icon, menu, desktop, print, open, close, program, folder, file, network drive, security, reboot, locked

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- Direct instruction
- Modeling of performance task
- Collaborative activity
- Independent analysis
- Teacher created Internet and MS Office activities

Extension Strategies/Activities:

• Design technology improvements

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A**.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Westampton Township School District Curriculum Guide

Grade 4 Content Area: Technology

Suggested Assessments:

Performance Task:

- Oral response
- Printed response/student work
- Teacher Observation

Curriculum Guide

Grade 4 Content Area: Technology

Computer Navigation Basics	Suggested Sequence: Topic #2

NJSLS:

- 8.1.4.A.1 -Demonstrate effective input of text and data using an input device.
- 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program.

Biq Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How to navigate through program menus and to recognize and use symbols, properties, and online Help.
- How to identify software groups, choose taskappropriate software, and create and work with files and file formats?

Enduring Understandings:

Navigation tools are convenient ways for users to access and manipulate various computer software, programming, and applications.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- To navigate through program menus.
- To use toolbars.
- To use online help and mouse over text.
- To start and exit programs.
- To create, name, save, print, and close files.
- To identify software groups by function.
- To select software according to its appropriateness to a task.
- To identify and work with file formats.

Students will be able to:

- Understand the connection between program menu icons and toolbar buttons.
- Explore software programs.

Instructional Materials/Resources:	Suggested Vocabulary:
Handouts	Disk drive, network, access, file, folder, text box,
Models	drop down menu, menu, minimize, maximize,
Computer Lab	restore, recycle bin
Smart board/projector	Technology:
Web resources	Computer, keyboard, mouse
Application software	

Recommended Instructional Activities:

- Provide visual and tactile reference to computer hardware.
- Model program operations
- Provide paper handouts
- Utilize web resources/activities

Extension Strategies/Activities:

Teach a younger student how to navigate the computer

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- 9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- 9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Westampton Township School District Curriculum Guide

Grade 4 Content Area: Technology

Suggested Assessments:

Performance Task:

- Oral response
- Printed response/student work
- Teacher Observation

Curriculum Guide

Grade 4 Content Area: Technology

Keyboarding Basics	Suggested Sequence:
	Topic #3

NJSLS:

8.1.4.A.4 - Create a simple spreadsheet, enter data, and interpret the information.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- What is the role of the cursor?
- How to delete text by using the Backspace or Delete key?
- How to use the arrow keys to move the cursor and how to use the Tab key to create large spaces?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Student will learn:

- Proper posture for keyboarding
- To identify touch keys.
- To type basic punctuation
- To type number row keys.
- To type numbers without looking at the keyboard.
- To understands reach keys.

Student will gain:

- Additional experience keying letters and learns to form words.
- Additional familiarity with the placement of keys on the keyboard.
- Student continues to use the enter/return key and backspace/delete key.
- Additional speed and accuracy.

Instructional Materials/Resources:	Suggested Vocabulary:
Type to Learn 4	Keyboard, home row, shift, spacebar,
Keyboard/mouse	backspace, tab, keys, enter, cursor
monitor	Technology:
	Computer, keyboard, mouse

Recommended Instructional Activities:

Type to Learn program lessons

Extension Strategies/Activities:

Advance Type to Learn assignments

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

- Keyboarding Test from Type to Learn
- Teacher Observation of individuals and groups.

Curriculum Guide

Grade 4 Content Area: Technology

Word Processing Suggested Sequence: Topic #4

NJSLS:

- 8.1.4.A.1 Demonstrate effective input of text and data using an input device.
- 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program.
- 8.1.4.A.3 Create and present a multimedia presentation that includes graphics.
- 8.1.4.B.1 Produce a media-rich digital story about a significant local event or issue based on first-person Interviews

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- · How to open a word processing program.
- To create a new document
- To use the cursor.
- To save a file
- · To close a file.
- To open a file.
- To print a file.
- To exit a word processing program.
- · To select text.
- To change font size.
- To change font style by applying bold, italic, and underline formatting.
- To use the cut, copy, and paste commands.
- · To insert graphics and resize
- To use copy, cut and paste functions.

Instructional Materials/Resources: Compute Lab MS Word MS Publisher Ms PowerPoint Handout/printed material Smart board/projector Suggested Vocabulary: Text, font, font size, font color, numbered list, bullets, tab, print preview, show/hide, bold, center, underline Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

- Modeling of task
- Follow multi step instruction
- Project example
- Direct instruction
- Microsoft Office teacher generated activities.

Extension Strategies/Activities:

Advanced PowerPoint presentation components

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- 9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.

Curriculum Guide

Grade 4 Content Area: Technology

9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

Oral Response

Printed response/student work

Teacher observation

Rubric

Test

Curriculum Guide

Grade 4 Content Area: Technology

Web Browsing Basics Suggested Sequence: Topic #5

NJSLS:

- 8.1.4.A.5 Determine the benefits of a wide range of digital tools by using them to solve problems
- 8.1.4.C.1 Engage in online discussions with learners in the United States or from other countries to understand their perspectives on a global problem or issue
- 8.1.4.D.1 Explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.
- 8.1.4.D.2 Analyze the need for and use of copyrights.
- 8.1.4.D.3 Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology.
- 8.1.4.E.2 Evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
- 8.1.4.F.1 Select and apply digital tools to collect, organize, and analyze data that support a scientific finding.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How to use keywords and categories in search engines. It also teaches privacy issues to consider when providing information on the World Wide Web?
- How to identify and use URLs to research information online, create and use bookmarks, and use the navigation buttons?

Enduring Understandings:

 Technology use can have positive or negative impact on both users and those affected by their use.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- To perform outline searches using search engines.
- To perform both real text and keyword searches.
- To perform category searches to find information.
- To determine the success of a search
- To recognize the privacy issues involved with providing personal information on web pages.
- Communicate with students from other classes, schools, states or countries

Instructional Materials/Resources:

Computer Lab Internet Explorer

Handouts

Smartboard/Projector

Epals

Webcams

Skype

whiteboard

Suggested Vocabulary:

World Wide Web, search box, URL, database, website, homepage, link, webpage, plagiarism, copyright

Technology:

Computer, technology, mouse

Recommended Instructional Activities:

- Complete the "Keyword Searches" activities.
- Microsoft Explorer teacher generated activities.
- Modeling of task
- Direct Instruction

Extension Strategies/Activities:

Design web browsing basics book for younger students

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A**.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.

Curriculum Guide

Grade 4 Content Area: Technology

9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

- Performance Task
- Webquest
- Rubric
- Teacher Observation of individuals and groups

Curriculum Guide

Grade 4 Content Area: Technology

Multimedia Presentation Basics Suggested Sequence: Topic #6

NJSLS:

- 8.1.4.A.1 Demonstrate effective input of text and data using an input device.
- 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program.
- 8.1.4.A.3 Create and present a multimedia presentation that includes graphics.
- 8.1.4.B.1 Produce a media-rich digital story about a significant local event or issue based on first-person Interviews

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How can presentation software be used to tell stories and present ideas and information?
- How to identify a story's sequence and view slides and slide shows in presentation software?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- That presentation software is used to make slide shows on a computer.
- That a slide show is made up of a series of slides.
- To navigate through a slide show.
- To add multiple slides to a presentation.
- To choose a specific slide layout.
- To add a specific background design to slides.
- To add a footer to each slide.
- To use slide preview and other views to evaluate work progress and final product.
- To add animation, sound and transition effects to a slide presentation.

Instructional Materials/Resources: Computer Lab Multimedia software Smart board/projector MS PowerPoint Suggested Vocabulary: Multimedia, graphic, clipart, design, layout, design, text box, graphic box, header/footer Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

- Modeling of task
- Follow multi-step instruction
- Project example
- Direct Instruction

Extension Strategies/Activities:

Advanced presentation components

Modification Strategies/Activities:

- As per IEP/504
- · More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- 9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

Student group activity, Student individual work, Rubric

Curriculum Guide

Grade 4 Content Area: Technology

Spreadsheet Basics Suggested Sequence: Topic #7

NJSLS:

- 8.1.4.A.4 Create a simple spreadsheet, enter data, and interpret the information.
- 8.1.4.F.1 Select and apply digital tools to collect, organize, and analyze data that support a scientific finding
- 8.2.4.D.1 Analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- How to format table cells in spreadsheet programs by merging cells, applying number formats, aligning cell data, adding borders, indenting data, and coloring cells?
- How to add, insert, and resize columns and rows in spreadsheet tables; sort table information; and use the Summation tool

Enduring Understandings:

 Spreadsheets are valuable to everyday users, when there is a proficient understanding of its use.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- How to format cells data, including number, date, and general formats.
- How to use Sum function.
- How to enter data into a spreadsheet.
- How to use Sort function to organize information in a table.
- Analyze data collected to support scientific research
- Produce charts from data taken

Instructional Materials/Resources: MS Excel Computer Lab Smartboard/projector Kids Zone Graphs Suggested Vocabulary: Spreadsheet, row, column, cell, worksheet, chart, graph, data, sum, sort Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

- Teacher generated Microsoft Excel activities.
- Creating graphs and charts
- Adding data to spreadsheet cells
- Modeling
- Following multi-step instruction

Extension Strategies/Activities:

• Advanced spreadsheet components

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- **9.1.4.A.3** Determine when the use of technology is appropriate to solve problems.
- **9.1.4.A.**4 Use data accessed on the Web to inform solutions to problems and the decision-making process.
- **9.1.4.C.1** Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
- **9.1.4.E.1** Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

• Projects, Teacher Observation of individual and groups, Test

Curriculum Guide

Grade 4 Content Area: Technology

Education, Engineering and Technology Design	Suggested Sequence: Topic #8

NJSLS:

- 8.2.4.A.1- Investigate factors that influence the development and function of technology products and systems.
- 8.2.4.A.2 Using a digital format, compare and contrast how a technology product has changed over time due to economic, political, and/or cultural influences.
- 8.2.4.B.1 Develop a product using an online simulation that explores the design process.
- 8.2.4.B.2 Design an alternative use for an existing product.
- 8.2.4.B.3 Explain the positive and negative effect of products and systems on humans, other species, and the environment
- 8.2.4.B.4 Compare and contrast how technology transfer happens within a technology, among technologies, and among other fields of study.
- 8.2.4.C.1 Explain the impact of disposing of materials in a responsible way.
- 8.2.4.C.2 Explain the purpose of trademarks and the impact of trademark infringement on businesses.
- 8.4.2.C.3 Examine ethical considerations in the development and production of a product from its inception through production, marketing, use, maintenance, and eventual disposal by consumers .
- 8.2.4.D.1 Analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses.
- 8.2.4.E.1 Work in collaboration with peers to produce and publish a report that explains how technology is or was successfully or unsuccessfully used to address a local or global problem.
- 8.2.4.F.1 Describe how resources are used in a technological product or system.
- 8.2.4.F.2 Explain how the resources and processes used in the production of a current technological product can be modified to have a more positive impact on the environment (e.g., by using recycled metals, alternate energy sources) and the economy.
- 8.2.4.G.1 Examine a malfunctioning tool and use a step-by-step process to troubleshoot and present options to repair the product.
- 8.2.4.G.2 Explain the functions of a system and subsystems.
- 8.4.2.G.3 Evaluate the function, value, and aesthetics of a technological product, system, or environment from the perspective of the user and the producer.

Big Ideas:

Technology is created through the design process

Essential Questions:

- How does the design world work/what is the design process?
- How can producers and consumer sin the designed world work together?
- How do available resources contribute to design process?

Enduring Understandings:

- Technology products and systems impact every aspect of our world
- Design process provides a means of converting resources into products and systems.
- Producers and consumers in the designed world have different perspectives.

Knowledge, Skills, and Instructional Objectives:

Students will learn:

- Investigate factors that influence the development and function of technology products and systems.
- Develop an alternate use for an existing product
- Explain the purposes of a system and subsystem
- List troubleshooting steps
- Discuss roles of producers and consumers
- Discuss disposal of technology products and effects on environment
- Discuss negative/positive effects of products on living creators and the environment.

Instructional Materials/Resources:	Suggested Vocabulary:
Handouts	System, subsystem, design, engineer,
Models	troubleshoot, simulation, reuse, environmental
Presentations	impact

Curriculum Guide

Grade 4 Content Area: Technology

Ī	Technology/engineering websites	Technology:
	Computer lab	Computer, keyboard, mouse
	Smartboard/projecter	

Recommended Instructional Activities:

- Collaborate activity
- Independent analysis
- Teacher presentation
- Teacher discussion
- Simulation activity

Extension Strategies/Activities:

 Discuss roles of technology with students from other schools/countries

Modification Strategies/Activities:

- As per IEP/504
- · More time allotted for assignments as needed

Cross-curricular Connections/Standards:

9.1.4.A.3 Determine when the use of technology is appropriate to solve problems.

9.1.4.A.4 Use data accessed on the Web to inform solutions to problems and the decision-making process.

9.1.4.C.1 Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).

9.1.4.E.1 Explain how digital media are used in daily life in a variety of settings.

Suggested Assessments:

Performance Task:

Teacher observation

Student responses

Printed documents

Curriculum Guide

Grade 5-6 Content Area: Technology

Unit:	Suggested Sequence:
Computer Basics	Topic #1

NJSLS:

- 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
- 8.1.8.D.1 Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics
- 8.1.8.D.2 Summarize the application of fair use and creative commons.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- When are the most sophisticated tools required and when are the simplest tools best?
- Can a system continue to operate with a missing or malfunctioning component?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- All technological activities use resources that include tools/machines, materials, information, energy, capital, time and people.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Use a username and password to log on to a network.
- Understand intellectual property and how it applies to files and software.
- Understand the concept of being online.
- Safety precautions taken while online.
- Understand why there is a filtering device on the school computers
- Understand why the computers are monitored at all times.
- Create a folder.
- Save/organize documents in folders.

Instructional Materials/Resources: Access to Computers, Microsoft Office AUP, save, save as, toolbar, icon, Technology: Computer, keyboard, mouse

Recommended Instructional Activities:

- Explain how to use usernames and passwords to log on to a network.
- Students will create and organize electronic portfolios:
- Students write the location of their electronic portfolios.
- Students use word processing software to create a rubric/checklist.
- Students save their rubrics in their portfolio folders.
- Students select one or more activities for their portfolios to represent each type of application they learn.
- Students assess their activities with the criteria listed on the student rubric.
- Teacher generated activities utilizing Microsoft Word and Publisher.

Curriculum Guide

Grade 5-6 Content Area: Technology

Extension Strategies/Activities:	Modification Strategies/Activities:
 Extended rubric 	As per IEP/504
	 More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

- Share passwords with teachers to have access to students work
- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Project
- Teacher Observation of individuals and groups.

Curriculum Guide

Grade 5-6 Content Area: Technology

Unit:	Suggested Sequence:
Computer Navigation	Topic #2

NJSLS:

- 8.1.8.D.1 Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.
- 8.1.8.D.2 Summarize the application of fair use and creative commons.
- 8.1.8.D.3 Demonstrate how information may be biased on a controversial issue.

Big Ideas:

- A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.
- Technological literacy skills enable learners to adapt to a rapidly changing, man-made world by using problem solving to generate solutions from the conceptual stage to the final product.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- Can we control the pace at which technology is created? Should we, even if we can?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technology evolves at an ever accelerating pace based on the needs/wants of society and is influenced by cultural, political, and environmental values and constraints.
- Technological outcomes have the potential for anticipated and unanticipated positive and negative results.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Understands networking terminology, such as online and network, LAN and WAN, intranet and Internet.
- Learn the advantages of connecting a computer to a network.
- Learn the concept of and difference between LAN and WAN.
- Learn the concept of and difference between an intranet and the Internet.
- Learn to access remote equipment, such as a printer.
- Learn strategies to access information on a LAN or intranet for research and resource sharing.
- Learn about intellectual property and ethical use of another's intellectual property
- Begin to understand file format and cross-platform compatibility issues. Learn to perform online searches using search engines.
- Learn to perform both real text and keyword searches.
- Learn to perform category searches to find information.
- Learn to determine the success of a search.
- Student recognizes the privacy issues involved with providing personal information to web pages

Instructional Materials/Resources:

• Access to computers, MS Office, access to interne

Suggested Vocabulary:

Intranet, Internet, LAN, WAN, peripherals, network, intellectual property, cross platform compatibility.

Technology:

Computer, keyboard, mouse

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Recommended Instructional Activities

- Explain how the differences between WAN's and LAN's and internet and intranet.
- Complete the Network Basics activity checklist.

Extension Strategies/Activities:

 Design a PowerPoint presentation for younger stundents on internet safety

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

Cross-curricular Connections/Standards:

- Students will be able to open documents in various locations throughout the school.
- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Successful completion with a minimum of 85% on teacher designed Network Basics activity checklist
- Teacher Observation of individuals and groups.

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Unit:	Suggested Sequence:
Keyboarding	Topic #3

NJSLS:

8.1.8.A.1 - Create professional documents (e.g. Newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- Can we control the pace at which technology is created? Should we, even if we can?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- A system has interrelated components designed to collectively achieve a desired goal.
- All technological activities use resources that include tools/machines, materials, information, energy, capital, time and people.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Learn proper posture for keyboarding.
- Learn how to identify touch keys.
- Understand how to reach keys.
- Learn how to type basic punctuation.
- · Learn to type number row keys.
- Learn to type numbers without looking at the keyboard

Instructional Materials/Resources: Access to Computers, Type to Learn Suggested Vocabulary: Home Keys Technology: Computer, keyboard, mouse

Recommended Instructional Activities

- Type to Learn activities.
- Internet typing activities.

Extension Strategies/Activities:

Increase speed and accuracy requirements

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.

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- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Teacher Observation of individuals and groups.
- Type to Learn quizzes and tests.

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Unit:	Suggested Sequence:
Web Browsing Basics	Topic #4

NJSLS:

- 8.1.8.A.1 Create professional documents using advances features of a word processing program.
- 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
- 8.1.8.D.1 Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics..

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technology evolves at an ever accelerating pace based on the needs/wants of society and is influenced by cultural, political, and environmental values and constraints.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Learn to perform online searches using search engines.
- Learn to perform both real text and keyword searches.
- Learn to perform category searches to find information.
- Learn to determine the success of a search.
- Student recognizes the privacy issues involved with providing personal information to web pages.

Instructional Materials/Resources:

Access to Computers, Access to internet, MS Office, Worldbook Online

Suggested Vocabulary:

Keyword, copyright, plagiarism, Navigation buttons, Favorites/Shortcut

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities

• Successful completion of teacher generated Cheetah Project

Extension Strategies/Activities:

Internet searches

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups,

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and society as a whole.

9.1.8.E.4 Determine the undesired consequences of unethical uses of media.

9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Teacher Observation of individuals and groups.
- Project completion with minimum grade of 85%.

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Unit:	Suggested Sequence:
Word Processing Basics	Topic #5

NJSLS:

- 8.1.8.A.1 Create professional documents (eg. Newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.
- 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Student learns to create documents using more than one software application.
- Student creates documents incorporating a variety of data types such as text and graphics.
- Student uses print preview to evaluate work progress and final product.
- Student considers document design and layout to ensure appropriateness for audience and media.
- Student learns to create checklists.
- Effective Color Pallettes, Applying text color, Text Formatting, Drawing and Customizing Shapes.

Instructional Materials/Resources: Access to Computers, MS Office, Inspiration, camera Access to Computers, MS Office, Inspiration, camera Print Preview, Bullets, Number, Center, Spacing, Insert, text wrapping Technology: Computer, keyboard, mouse

Recommended Instructional Activities

- Complete the All About Me list
- Create paragraph from All About Me list.
- Create flyer in Publisher using All About Me list.
- Transpose Publisher assignment into Inspiration graphic organizer.
- Microsoft Word and Publisher teacher generated activities.

Extension Strategies/Activities:

• Extend number of required fields for each component of project

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

- Science project Animal Research using Inspiration application
- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.

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- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Successful completion with a minimum of 85% on the All About Me activity.
- Successful completion with a minimum of 85%, of the transfer of All About Me activity from MS Publisher to Inspiration.
- Successful completion with a minimum of 85% on Vocabulary Quiz.
- Project
- Teacher Observation of individuals and groups.

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Grade 7-8 Content Area: Technology

Unit:	Suggested Sequence:
Pen Pals	Topic #1

NJSLS:

- 8.1.8.A.1 Create professional documents (eg. Newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.
- 8.1.8.C.1 Participate in an online learning community with the learners from other countries to understand their perspectives on a global problem / issue and propose a possible solution.
- 8.1.8.F.1 Use and electronic authoring tool in collaboration with learners from other countries to evaluate and summarize the perspectives of other cultures about a current event or contemporary figure.
- 8.2.8.A.1 Explain the impact of globalization on the development of a technological system over time.

Big Ideas:

- A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning
- Technological literacy skills enable learners to adapt to a rapidly changing, man-made world by using problem solving to generate solutions from the conceptual stage to the final product.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technology evolves at an ever accelerating pace based on the needs/wants of society and is influenced by cultural, political, and environmental values and constraints.
- Technological outcomes have the potential for anticipated and unanticipated positive and negative results.
- All technological activities use resources that include tools/machines, materials, information, energy, capital, time and people.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Using epals.com register with a classroom from another country.
- Set up a communication between the two classrooms in a pen pal scenario.
- Students will use MS Word to type up a class newsletter that we can share.
- Students will write letters to their pen pal in Word using their proper typing techniques

Instructional Materials/Resources:

Access to Computers, Type to Learn

Suggested Vocabulary:

Processor, processor speed, I/O devices, data storage devices, RAM, ROM, motherboard.

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities

- Students demonstrate an understanding of computer component functions.
- Students match computer component terms with definitions.
- Students identify whether specified components are input or output devices.
- Discuss online ethics and consequences of unethical behavior.

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Extension Strategies/Activities:	Modification Strategies/Activities:
Extended Vocabulary	As per IEP/504
	 More time allotted for assignments as needed.

Cross-curricular Connections/Standards

Language Arts, letter writing

- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Teacher Observation of individuals and groups.
- Student Demonstration.

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Grade 7-8 Content Area: Technology

Unit:	Suggested Sequence:
Presentation Basics	Topic #2

NJSLS:

8.1.8.A.3 Create a multimedia presentation including sounds and images.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technological outcomes have the potential for anticipated and unanticipated positive and negative results.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- add simple drawn objects to a slide show, including shapes, lines, and arrows.
- duplicate a slide.
- select an appropriate color palette for a slide show.
- modify the color of objects in a slide show.
- use preview panes to help in the design of a slide show.
- add basic audio and visual effects to a slide show.
- add animation effects to a slide show.
- use the Slide Sorter.
- use preview panes to help in the design of a slide show.
- use the Outline pane, slide show previews, and other views to evaluate work progress and final product.

Instructional Materials/Resources:

Access to computers, MS Office, Internet, Worldbook Online

Suggested Vocabulary:

5X7 Rule, slides, design, template

Technology:

Computer, keyboard, mouse

Recommended Instructional Activities:

- States PowerPoint
- Autobiography/Power Point

Extension Strategies/Activities:

Additional facts researched.

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

Presentations for other subjects.

- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.

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- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Successful completion with a minimum of 85% on States project.
- Teacher Observation of individuals and groups.
- Successful completion with a minimum of 85% on Vocabulary Quiz

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Unit:	Suggested Sequence:
Presentation Basics 2	Topic #3

NJSLS:

8.1.8.A.3. - Create a multimedia presentation including sounds and images.

8..2.8.C.2 - Compare and contrast current and past incidences of ethical and unethical use of labor in the United States or another country and present the results in a media rich presentation.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technology evolves at an ever accelerating pace based on the needs/wants of society and is influenced by cultural, political, and environmental values and constraints
- Technological outcomes have the potential for anticipated and un anticipated positive and negative results.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Add animation effects to text, pictures, and other objects.
- Add sound effects in conjunction with animation effects.
- Add transition effects.
- Set animation order and timing.
- Gain a basic understanding of the uses of different presentation views.
- Gain a basic understanding of layers and object grouping.
- Differentiate between linear and non-linear presentations.
- Identify and change the focus of a slide.
- Consider basic elements of design.

Instructional Materials/Resources: Access to computers, Internet, MS Office Transition, timing, grouping Technology: Computer, mouse, keyboard

Recommended Instructional Activities:

- Power Point Presentation on the ethical and unethical use of labor in the US or other countries (eg. slavery)
- Present slideshow.

Extension Strategies/Activities: • Additional slides • As per IEP/504 • More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.

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- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Successful completion with a minimum of 85% on teacher created rubric.
- Successful completion with a minimum of 85% on PowerPoint slides.
- Successful completion with a minimum of 85% on oral presentation.
- Teacher Observation of individuals and groups.

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Unit:	Suggested Sequence:
Cumulative Office Project	Topic #4

NJSLS:

- 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
- 8.1.8.A.4 Generate a spreadsheet to calculate, graph, and present information.
- 8.1.8.A.1 Create a professional documents (eg. Newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.

Big Ideas:

A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technology evolves at an ever accelerating pace based on the needs/wants of society and is influenced by cultural, political, and environmental values and constraints.
- A system has interrelated components designed to collectively achieve a desired goal.
- All technological activities use resources that include tools/machines, materials, information, energy, capital, time and people.

Knowledge, Skills, and Instructional Objectives: Students will be able to:

- Develop a logo in Publisher
- Produce a certificate in Publisher
- Produce a calendar in Publisher
- Type an article in Word
- Input data into Excel Identify cells by their location name (A1, H67, etc.).
- Use the summation command.
- Learn the correlation between what is typed into a cell and what appears on the screen.
- Enter formulas in cells.
- Enter cell names in a formula to perform mathematical calculations.
- Learn the advantages of using cell names in formulas rather than the values in the cells.
- Understand that copying and pasting formulas in a spreadsheet is relative and not exact.
- Use absolute reference when copying and pasting formulas.
- Use functions in a spreadsheet.
- Specify cell ranges in functions in a spreadsheet.
- Experience using numerical formulas in a spreadsheet.

Instructional Materials/Resources:	Suggested Vocabulary:
Access to Computers, MS Office	fields, table
	Technology:
	Computer, keyboard, mouse

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Recommend	lad Inc	tructional	Activities

Football/Basketball/Baseball Projects

Extension Strategies/Activities:

Advanced use of Microsoft Programs

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

- Teacher Observation of individuals and groups.
- Type to Learn guizzes and tests.

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Database Topic #5	Unit:	Suggested Sequence:
	Database	Topic #5

NJSLS:

8.1.8.A.2 - Plan and create a simple database, define fields, input data, and produce a report using sort and query.

Big Ideas:

- A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning
- Technological literacy skills enable learners to adapt to a rapidly changing, man-made world by using problem solving to generate solutions from the conceptual stage to the final product.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Create a new database in Microsoft Access
- Students will input data
- Students will be able to perform a query search within their database
- Students will produce a report using the information within the database.

Instructional Materials/Resources: Access to Computers, MS Office Access to Computers, MS Office Technology: Computer, keyboard, mouse

Recommended Instructional Activities

• Planet Project, Student Data Project

Extension Strategies/Activities:

Advanced database entry

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed.

Cross-curricular Connections/Standards:

- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

Suggested Assessments:

• Teacher Observation of individuals and successful completion of the database projects.

Curriculum Guide

Grade 7-8 Content Area: Technology

Unit:	Suggested Sequence:
Technology Fair Project – Product Development	Topic #6

NJSLS:

- 8.1.8.A.1 Create professional documents (e.g. Newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.
- 8.1.8.A.3 Create a multimedia presentation including sounds and images.
- 8.1.8.A.4 Generate a spreadsheet to calculate, graph, and present information.
- 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
- 8.2.8.B.1 Design and create a product using the design process that addresses a real world problem with specific criteria and constraints.
- 8.2.8.B.2 Identify the design constraints and tradeoffs involved in designing a prototype, (how the prototype might fail, and how it might be improved) by completing a design problem and reporting results in a multimedia presentation.
- 8.2.8.B.3 Solve a science based design challenge and build a prototype using science and math principles throughout the design process.
- 8.2.8.C.1- Explain the need for a patent and process of registering for one.
- 8.2.8.D.1 Evaluate the role of ethics and bias on trend analysis and prediction in development of a product that impacts communities in the United States or other countries.
- 8.2.8.E.1 Develop a product using the design process, data analysis, and trends and maintain a digital log with annotated sketches to record the development cycle in collaboration with peers and experts in the field.
- 8.2.8.F.1 Explain the impact of resource selection and processing in the development of a common technological product or system.
- 8.2.8.F.2 Explain how the resources and processes used in the production of a current product can be modified to have a more positive impact on the environment. (e.g. Recycled metals, alternate energy sources) and the economy.
- 8.2.8.G.1- Explain why human designed systems, products, and environments need to be constantly monitored, maintained and improved.
- 8.2.8.G.2- Explain the interdependence of a subsystem that operates as part of a system.

Big Ideas:

- A computer is an adaptable tool for organizing information and solving problems that facilitates lifelong learning
- Technological literacy skills enable learners to adapt to a rapidly changing, man-made world by using problem solving to generate solutions from the conceptual stage to the final product.

Essential Questions:

- In a world of constant technological change, what skills should we learn?
- How do I choose which technological tools to use and when it is appropriate to use them?
- How can I transfer what I know to new technological situations / experiences?
- What are my responsibilities for using technology? What constitutes misuse and how can it best be prevented?
- Can we control the pace at which technology is created? Should we, even if we can?
- How does technology extend human capabilities? What are the positive and negative consequences of technology? Should technologies that produce negative impact continue to be used?

Enduring Understandings:

- Technology is constantly changing and requires continuous learning of new skills.
- Selection of technology should be based on personal and/or career needs assessment.
- A tool is only as good as the person using it.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Technology evolves at an ever accelerating pace based on the needs/wants of society and is influenced by cultural, political, and environmental values and constraints.
- Technological outcomes have the potential for anticipated and un anticipated positive and negative results.

Westampton Township School District

Curriculum Guide

Grade 7-8 Content Area: Technology

- When are the most sophisticated tools required and when are the simplest tools best?
- Can a system continue to operate with a missing or malfunctioning component?
- Is it always beneficial to use the most economical material/materials for production of a technological product?
- The design process is fundamental to technology and engineering.
- A system has interrelated components designed to collectively achieve a desired goal.
- All technological activities use resources that include tools/machines, materials, information, energy, capital, time and people.

Knowledge, Skills, and Instructional Objectives:

Students will be able to:

- Using word students will type up their plan for an innovation
- Design a product or innovation that has real world application
- Create a report illustrating what the product is and describing its application and possible market
- Will develop a prototype of the product
- Will develop a power point presentation to show product development and to discuss the ethics and bias
 of how it would impact the community.
- Explain what impact their product will have on the environment and economy.
- Explain the process of mass production of the product and its impact on the community / environment.
- At completion of project be able to show a multi-media presentation for their project, display a prototype of the product, and explain its real world applications.

or the product, and explain to real world applicationer	product, and explain to real trend applications.					
Instructional Materials/Resources:	Suggested Vocabulary:					
Microsoft Office, Teacher examples and instruction	Innovation, product, prototype, real world application					
	Technology:					
	Computer, keyboard, mouse					

Recommended Instructional Activities:

A Technology Fair in which each student has a prototype on display

Extension Strategies/Activities:

Share designs with students from another school/country

Modification Strategies/Activities:

- As per IEP/504
- More time allotted for assignments as needed

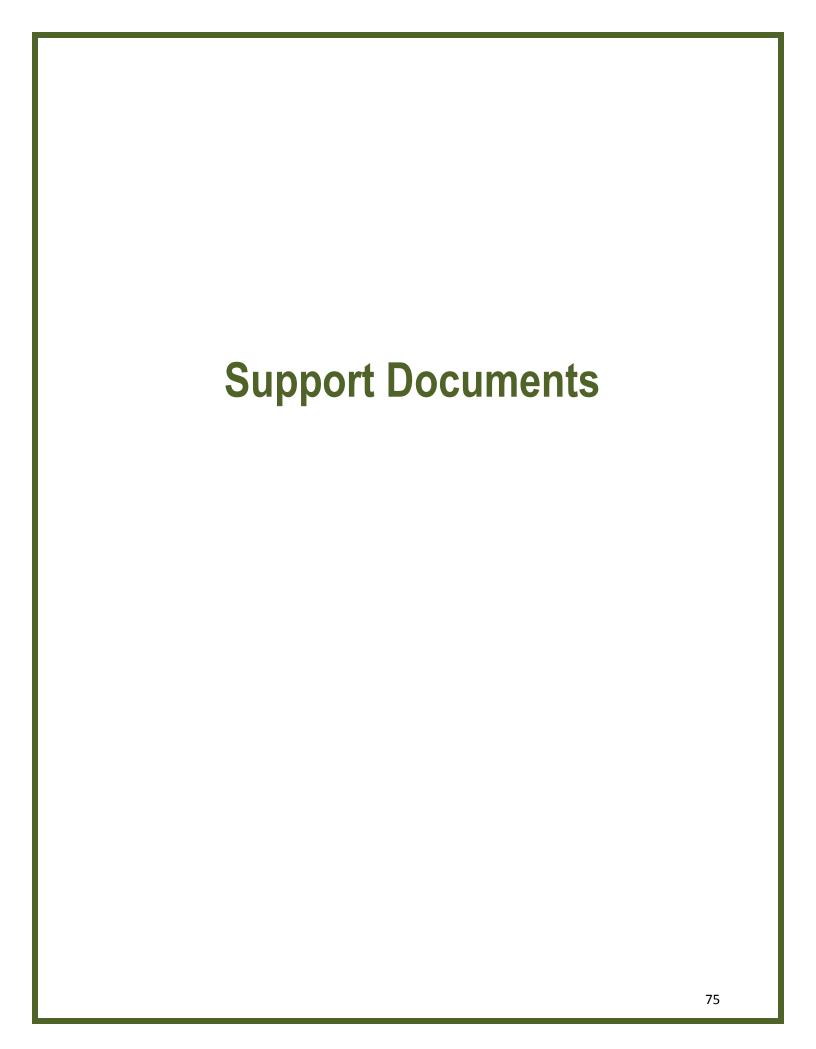
Cross-curricular Connections/Standards:

- Science
- Math
- Social Studies
- 9.1.8.A.1 Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
- 9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community.
- 9.1.8.B.2 Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions
- 9.1.8.E.1 Explain how technology has strengthened the role of digital media in the global society.
- 9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
- 9.1.8.E.3 Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
- 9.1.8.E.4 Determine the undesired consequences of unethical uses of media.
- 9.1.8.E.5 Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.

Suggested Assessments:

- Teacher Observation of individuals and groups.
- Teacher generated Assessment.
- Prototype development

Project completion		



Board Policies Applicable to Curriculum

2110 PHILOSOPHY OF EDUCATION

The Westampton Township Public Schools will provide a high quality, age appropriate educational experience that empowers children to reach their academic potentials, become well-rounded individuals and develop a love for learning within a safe, secure, nurturing social and academic environment.

The social environment is one which fosters: risk taking; development of positive self-concept; individuality; respect for diversity; social consciousness; positive social interaction, and encourages students to expand their roles as active participants in their community and world.

The academic environment will provide increased opportunities for students to: value learning; develop as creative and critical thinkers and problem solvers in both academic and social situations; and make critical connections between present learning and the world around them.

Adopted: 2 May 2000

2132 SCHOOL DISTRICT GOALS AND OBJECTIVES

The Board adopts the following goals and objectives for the operation of the educational program of the school district.

- Develop skills in reading, writing, speaking and listening.
- Develop skills in mathematics, science and computer science.
- Develop pride in work and a feeling of self-worth.
- Develop good character and self-respect.
- Gain a general education.
- Learn how to examine and use information.
- Learn to respect and get along with people with whom we work and live.
- Develop a desire for learning now and in the future.
- Learn about and try to understand the changes that take place in the world.
- Learn how to respect and get along with people who think, dress, and act differently.
- Learn how to be a good citizen.
- Understand and practice democratic ideas and ideals.
- Understand and practice the skills of family living.
- Learn how to be a good manager of money, property and resources.
- Learn how to use leisure time.
- Practice and understand the ideas of health and safety.
- Appreciate culture and beauty in the world.
- Develop skills to enter a specific field of work.
- Gain information needed to make job selections.

N.J.A.C. 6:8-2.1 N.J.S.A. 18A:7A-7 Adopted: 2 May 2000

2200 CURRICULUM CONTENT

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The Board of Education will provide the instruction and services mandated by law and rules as necessary for the implementation of a thorough and efficient system of free public education and such other instruction and services as the Board deems appropriate for the thorough and efficient education of the pupils of this district. The Board shall annually approve a list of all programs and courses that comprise the district's curriculum and shall approve any subsequent changes in the curriculum in accordance with Policy No. 2220.

For purposes of this policy "curriculum" means planned learning opportunities designed to assist pupils toward the achievement of the intended outcomes of instruction.

The curriculum will be reviewed by the Superintendent and approved annually by the Board. In accordance with law, the curriculum shall, as a minimum, include the curricular mandates of N.J.S.A. 18A - Education and N.J.A.C. 6 and 6A - Education and all of the New Jersey Core Curriculum Standards, Indicators and Frameworks.

The Superintendent is responsible for implementing the curriculum approved by the Board.

The Board directs that the curriculum be consistent with the educational goals and objectives of this district and responsive to identified pupil needs. The Superintendent shall, in consultation with teaching staff members, assure the effective articulation of curriculum across all grade levels and among the schools of this district, and among the constituent districts of the Rancocas Valley Regional School District.

The curriculum shall provide programs in accordance with Board policies and the New Jersey Core Curriculum Content Standards, including but not limited to:

- 1. Preparation of all pupils for employment or post secondary study upon graduation from high school.
- 2. Instruction in workplace readiness skills, visual and performing arts, comprehensive health and physical education, language arts literacy, mathematics, science, social studies (including instruction on the Constitution of the United States, United States history, Community Civics, and the geography, history and civics of New Jersey) and World Languages;
- 3. Continuous access to sufficient programs and services of a library/media facility, classroom collection, or both, to support the educational program of all pupils in accordance with Policy No. 2530;
- 4. Guidance and counseling to assist in career and academic planning for all pupils, in accordance with Policy No. 2411;
- 5. A continuum of educational programs and services for all children with disabilities, in accordance with Policy No. 2460 and Regulation Nos. 2460.1 through 2460.14;
- 6. Bilingual education, English as a Second Language, and English language services for pupils of limited English language proficiency, when the number of such pupils so necessitates, in accordance with Policy No. 2423;
- 7. Programs and services for pupils at risk who require remedial assistance in accordance with Policy Nos. 2414, 2415, and 5460;
- 8. Equal educational opportunity for all pupils in accordance with Policy Nos. 2260, 5750 and 5755;

- 9. Career awareness and exploration as required, and vocational education as appropriate;
- 10. Educational opportunities for pupils with exceptional abilities, in accordance with Policy No. 2464;
- 11. Instruction in accident and fire prevention;
- 12. A substance abuse prevention program;
- 13. A program for family life education; and
- 14. Programs that encourage the active involvement of representatives from the community, business, industry, labor and higher education in the development of educational programs aligned with the standards.

N.J.S.A. 18A:6-2; 18A:6-3; 18A:35-1 et seq. N.J.A.C. 6A:8-1.1 et seq.; 6A:14 et seq. N.J.A.C. 6:29-4.1; 6:29-6.6 New Jersey Core Curriculum Content Standards

Adopted: 17 October 2002

2210 CURRICULUM DEVELOPMENT

M

The Board of Education is committed to the continuing improvement of the educational program of the district. To this end, the curriculum shall be evaluated and modified in accordance with a plan for curriculum development.

As educational leader of the district, the Superintendent shall be responsible to the Board for the development of curriculum and shall establish procedures for curriculum development that insure the effective participation of teaching staff members, pupils, the community, and members of the Board.

The Superintendent shall report to the Board the objectives, evaluative criteria and costs of each proposed program before seeking Board adoption. New programs and courses of study shall not be acted upon by the Board until the meeting following their presentation, in order for Board members to have an opportunity to review the proposed program.

Criteria by which the Board will judge the acceptability of new course offerings include:

- 1. Does it address an identified pupil need?
- 2. Is it relevant to the Board's philosophy and goals and does it offer real possibilities for progress toward these goals?
- 3. If the proposed course replaces an existing program, what defect in the previous program is it designed to overcome?
- 4. Does it include the criteria by which progress can be measured?
- 5. Has it been thoroughly studied and/or tested by district staff or by another district? What were the results?
- 6. Has a curriculum guide been completed? If not, when can it be expected?
- 7. Have the associated textbooks been recommended to the Board?

8. Have the costs and time of implementation been reviewed, including inservice training?

A five-year plan for updating curriculum shall be developed and implemented. The Superintendent shall report annually on all progress in curriculum development and the implementation of the five-year curriculum plan at the time of the Board's annual adoption of curriculum.

The Superintendent may conduct experimental programs that are not part of the duly adopted curriculum and are deemed to be necessary to the continuing growth of the instructional program; he or she shall report to the Board any such pilot program conducted, along with its objectives, evaluative criteria, and costs, before each such program is initiated.

The Superintendent shall report to the Board periodically on all progress in curriculum development.

Adopted: 2 May 2000

2220 ADOPTION OF COURSES

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The Board of Education shall provide a comprehensive instructional program to serve the needs of the children of this district. In furtherance of this goal and pursuant to law, the Board shall annually adopt the existing courses of study. Adoption includes both content and credit allocation. The Board's policy in this respect is to:

- 1. Adopt those core content standards mandated by the state in a form acceptable to the State Department of Education.
- 2. Adopt additional core content standards to meet the changing needs of pupils and the community.
- 3. Adapt and revise existing courses of study to meet the changing needs of pupils and the community.

Existing courses shall be reviewed at regular intervals and revised as necessary. No course of study shall be eliminated, revised or implemented without the approval of the Board.

The Board directs that the curriculum of this district:

- 1. Be consistent with written goals, objectives and identified pupil needs;
- 2. Develop individual talents and interests and serve diverse learning styles to motivate pupil achievement;
- 3. Provide for continuous learning through effective articulation;
- 4. Provide all pupils continuous access to sufficient programs and services of a library/media facility, classroom collection, or both, to support the educational program;
- 5. Provide all pupils guidance and counseling to assist in career and academic planning;
- 6. Provide a continuum of educational programs and services for handicapped children, pursuant to law and regulation;
- 7. Provide bilingual programs for pupils whose dominant language is not English, pursuant to law and regulation;
- 8. Provide compensatory education programs for pupils, pursuant to law and regulation;
- 9. Provide all pupils equal educational opportunity, pursuant to law and regulation;
- 10. Provide career awareness and vocational education, pursuant to law and regulation;

11. Provide educational opportunities for exceptionally gifted and talented pupils.

The Superintendent shall maintain a current list of all courses of study offered by this district; shall furnish each member of the Board of Education with a copy upon request; and shall provide a copy in the district office for public referral.

Adoption of courses shall be by a recorded roll call majority vote of the full membership of the Board. This includes the courses in the special education and ESL/bilingual programs, and those for the adult high school.

N.J.S.A. 18A:4-25; 18A:4-28; 18A:7A-6; 18A:33-1; 18A:35-1 et seq.

N.J.A.C. 6:4-1.1 et seq.; 6:8-4.6; 6:8-7.1; 6:39-1.2

Adopted: 2 May 2000

2230 COURSE GUIDES

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The Superintendent shall oversee development of curriculum guides for every course and area of study for every grade level. Each guide shall contain objectives for concepts and skills to be taught and attitudes to be developed; necessary study skills; suggested materials and activities designed to achieve all of these; and evaluation criteria intended to test the extent to which learning objectives have been met.

Teachers shall use the guides as the core of their instructional planning. It shall be the responsibility of the building principal to ensure that curriculum guides are being followed.

A copy of each guide in use shall be kept on file in each school office. Such guides shall be available for inspection. Because curriculum guides are the means of implementing instruction in courses adopted by the Board as the curriculum of the district, the Board shall approve any new curriculum guides or any revision to an existing guide before they are put into effect.

N.J.S.A. 18A:33-1

Adopted: 2 May 2000

Curriculum Revision Commentary

In order to achieve the district's philosophy of high quality educational experiences for all students, curriculum review and revision must become an ongoing process in Westampton Township Public Schools. Therefore, in March 2007, the process of curriculum revision began with a 2007 – 2012 Five Year Curriculum Plan. The plan identified the status of curriculum development in the district and determined a pace for curriculum revision for the following five years. The Five Year Curriculum Plan resulted in the following curriculum revision schedule:

2010 – 2011--- Science, Mathematics K-2

2011 – 2012 --- Mathematics 3-5, English Language Arts, Music, Physical Education/Health, Art, Technology, World Language, Social Studies

2012 - 2013 --- Mathematics 6-8

Further examination of the curriculum documents revealed three key findings:

- New Jersey Core Curriculum Content Standards were not present in all content areas.
- There were instructional gaps in some content areas.
- New materials and resources, recently approved by the Board of Education, for use in the classroom, were not represented in the curriculum documents.

This resulted in curriculum mapping throughout all content areas, with the goal of rewriting curriculum in all areas to reflect the current best practices and programs implemented in the school district as well as align the curriculum with the New Jersey Core Curriculum Content Standards and the information provided in the New Jersey Standards Clarification Project Phase I.

The 2007-2008 WTSD Curriculum Audit was completed May 2008. This document supported the work of the 2006-2007 Five Year Curriculum Plan and offered the following 3 Phase process to rewriting the curriculum:

Phase I Curriculum Mapping – During the 2007 – 2008 school year, teachers documented the content/skills they taught in the classroom, the time of year the content/skills were taught, the materials they used, and their assessment.

Phase II Curriculum Writing – During the months of July and August 2008 teachers used curriculum maps, past curriculum, New Jersey Core curriculum Content Standards, and the New Jersey Standards Clarification Project Phase 1 to frame a draft curriculum document, organized by strands and/or units, which contained New Jersey Core Curriculum Content Standards, Big Ideas, Essential Questions, and Enduring Understandings, Knowledge, Skills, Objectives, Materials, Resources, Vocabulary, Technology, Activities, Extension, Modifications, Cross-Content Connections, and Assessment

Phase III – Curriculum Initial Implementation – During the following school year, teachers will have access to the draft for implementation in the classroom. They will provide revisions to the document including, but not limited to, instructional activities, extension, modification, and assessments.

The completion of Phase III will result in a curriculum document that is ready for full implementation the 2009-2010 school year.

Recommended 5 Year Cycle - In an effort to streamline the process for future curriculum review and revision, the following five-year curriculum revision cycle will be implemented:

Year 1: Curriculum Evaluation and Development

- Examine the state statues, state administrative code, and board policy to ensure compliance and develop direction for curriculum revision.
- Research current data, trends, and best practices in the content area.
- Complete curriculum audit, including teacher surveys and discussions, to determine curriculum strengths and areas of concern
- Develop K-8 curriculum maps in the respective content area
- Determine learning outcomes, and assessments based on state standards
- Select and purchase new programs and materials, if necessary
- Plan district wide articulation sessions focusing on new initiatives

Year 2: Initial Implementation and Revision

- Create a new curriculum draft
- Plan professional development to facilitate the implementation of new instructional practices and programs relative to the new curriculum.
- Provide professional development for administrators to support the implementation and supervision of new curriculum.
- Use teacher feedback and recommendation to support revisions of the curriculum draft.
- Include additional instructional activities, cross-curricular connections and technology to move the document from being a work in progress to a finished product.
- Begin collecting and analyzing data to determine impact of new curriculum on student learning.

Years 3 and 4: Full Implementation

- Implement revisions to the curriculum
- Monitor the implementation of curriculum with the new revisions.
- Continue to provide support and staff development
- Identify further areas of revision and amend the curriculum, if necessary.
- Continue to collect and analyze data to determine the impact of curriculum on student learning.

Year 5: Full Implementation/Revision Planning

- Monitor the implementation of curriculum with the new revisions.
- Continue to provide support and staff development
- Identify further areas of revision and amend the curriculum, if necessary.
- Continue to collect and analyze data to determine the impact of curriculum on student learning.
- Plan for new curriculum revision cycle/curriculum evaluation and development.

It is important to note, however, that recent changes in NJ legislature states that if the NJCCCS standards change, no district will be allowed to wait until they are in a curriculum revision year (i.e. year 5 of a five-year curriculum revision cycle) to revise the affected curriculum. Districts will have twelve months from the date the new standards are adopted to update and amend their curriculum documents.

Westampton Township School District Lesson Plan Template

Teach	ier:	Subject:		Week Of:						
				M	T	W	T	F		
1.	Standards:									
2.	Essential Questions:									
3.	Enduring Understandings	<u>:</u>								
4.	Objectives:									
5.	Assessment of Objectives	<u>3</u> :								
6.	Material/Resources:									
7.	Instructional Strategies:									
8.	Support for Special Need	<u>s:</u>								
9.	Closure Activity:									
10.	Homework:									

Westampton Township School District Curriculum Map Template

School: Subject: Teacher: Grade Level:

MONTH/YEAR	ESSENTIAL QUESTIONS	CONTENT/CONCEPT	SKILLS	ASSESSMENT	SUGGESTED ACTIVITIES/RESOURCES

Modifications and Extensions: A Guide for <u>Differentiated Instruction</u>

(Formerly Instructional Adaptations in the Classroom for Students with Diverse Needs)

Introduction

The students populating U.S. classrooms today are a diverse lot. They come from differing cultures and have differing learning styles. They arrive at school with differing levels of emotional and social maturity. Their interests differ greatly, both in topic and intensity. At any given time, they reflect differing levels of academic readiness in various subjects-and in various facets of a single subject.

In life, kids can choose from a variety of clothing to fit their differing sizes, styles, and preferences. We understand, without explanation, that this makes them more comfortable and gives expression to their developing personalities. In school, modifying or differentiating instruction for students of differing readiness and interests is also more comfortable, engaging, and inviting. One-size-fits-all instruction will inevitably sag or pinch-exactly as single-size clothing would-student who differ in need, even if they are chronologically the same age.

While the goal for each student is challenge and substantial growth, teachers must often define challenge and growth differently in response to students' varying interests and readiness levels.

- Carol Ann Tomlinson, How to Differentiating Instruction in Mixed-Ability Classrooms

The concept of differentiation, also referred to "differentiating instruction", "differentiated instruction", "differentiated learning", "adaptations", has become an important conversation in teaching and learning. This places students at the center of teaching and learning and upholds data and student needs as the vehicle to drive instructional planning and practices.

"Differentiating the curriculum" requires qualitative, proactive, and multiple approaches to learning in an effort to provide appropriate adjustments to content, teaching strategies, expectations of student mastery, and scope and sequence.

In a differentiated classroom, students work at different paces, have different strengths, and therefore, need instruction that is tailored to meet their individual needs. This need for differentiation is magnified when students have disabilities, are limited in English proficiency, or are advanced and need to be challenged academically to maintain motivation for learning.

This document is designed to offer support to teachers as a resource for strategies to use in their classroom considering that most classroom contain a broad range of levels, skills, and interests. Please note that while this document is categorized to reflect specific student subgroups, many of the strategies can overlap and prove to be effective instructional practices for all students.

Practices that Support Students with Various Needs

(Students include those supported under the umbrella of Special Education. 504 students and at-risk students)

Student Motivation

Rationale: Some students with disabilities and struggling learners may be reluctant to engage or persist in language arts literacy activities. This reluctance may be due to difficulties with aspects of language or literacy processes resulting in repeated failures despite students' initial efforts and desire to learn. Because of these difficulties motivational strategies are important to help students with disabilities become successfully involved in a variety of literacy experiences to develop proficiency, confidence, and enjoyment.

Purpose:

Create interest Develop persistence Build confidence

Promote enjoyment

Foster independence

Strategies:

Personally meaningful activity

Activity choice

Hands-on, multimodal activities

"Doable" tasks

Attention to learning style

Student involvement in goal setting Modified assessment activities Choice to work with others or alone

Instructional Presentation

Rationale: Some students with disabilities and struggling learners may require instructional presentations that will enable them to acquire, comprehend, recall, and apply science content and related processes. In addition, instructional presentation adaptations can enhance a student's attention and ability to focus on instruction.

The primary purpose of these adaptations is to provide special education students with teacher-initiated and teacher-directed interventions that prepare students for learning and engage students in the learning process (*Instructional Preparation*); structure and organize information (*Instructional Prompts*); foster understanding of new concepts and processes (*Instructional Application*); and promote student self-reflection and self-management regarding tasks demands, goal attainment, and performance accuracy (*Instructional Monitoring*).

<u>Instructional Preparation</u>

Purpose:

Motivate

Establish purpose and goals of lesson

Activate prior knowledge

Build background

Focus

Examples:

Previewing information/materials

Advanced organizers

Brainstorming and webbing

Questioning techniques

K-W-L strategies

Organize

Warm-ups

Visual demonstrations, illustrations, models

Mini-lessons

Instructional Prompts

Purpose:

Organize information

Build whole-part relationships Cue associations and connections

Highlight essential concepts

Generate categorization and comparisons

Activate recall Summarize

Examples:

Graphic organizers

Semantic organizers

Outlines

Mnemonics

Analogies

Feature analysis

Color coding

Key words/Labels

Writing frames/templates

Restating/clarifying oral directions

Cue Cards

Pictures

Movement cues

Notetaking guides

Segmenting/chunking tasks
Directions on overhead/board

Instructional Application

Purpose:

Simplify abstract concepts

Provide concrete examples

Extend ideas and elaborate understanding

Build connections and associations

Relate to everyday experiences

Promote generalization Engage multiple modalities Examples:

Graphics and charts

Data charts

Flow charts

Drawings and other illustrations

Dramatics – role play

Props and manipulatives

Field trips

Games and puzzles

Models

Interviews/surveys

Think aloud - modeling

Simulations

Hands-on activities

Constructions

Dramatizations

Music and movement

Concept activities

Application activities

Real-life applications (write letter to editor)

Instructional Monitoring

Purpose:

Provide checks for understanding

Redirect attention
Direct on-task behavior
Promote participation
Check progress

Assist in goal setting Establish timelines

Clarify assignments, directions, and directions Provide reinforcement and corrective feedback

Promote strategy use and generalization Manage student behavior and interactions Develop self-questioning and self-regulation Examples:

Self-monitoring checklists

Think-alouds
Journal entries
Portfolios
Interviews

Questioning techniques Student contracts Reward system

Instructional Grouping

Purpose:

Cooperative learning groups

Peer partners Buddy Systems

Teams

Examples:

Assist physically

Clarify Prompt cue

Gestures and signals

Interpret Reinforce Highlight Organize Focus

Student Response

Rationale: Some students with disabilities and struggling learners may require specific adaptations in order to demonstrate acquisition, recall, understanding, and application of language arts and other content area procession in a variety of situations with varied materials while they are developing proficiencies in these areas.

The primary purpose of student performance responses is to provide students with disabilities and struggling learners a means of demonstrating process toward the lesson objectives related to the New Jersey Student Learning Standards.

Response Format Adaptation Examples:

- Dictation
- Use of PC/multimedia for composition of response
- Video and audiotapes
- Braille writing

- Signing with Interpretation
- Information and graphic organizers
- Illustrations
- Diagrams
- Construction models, dioramas, mobiles
- Songs, raps, and/or poems
- Brochure
- Game or puzzle
- Flip book
- Create test questions

Response Procedure Adaptation Examples:

- Extended time
- Practice Exercises
- Interpreter
- Use of preferred response format

Limited English Proficiency Students

Teachers need to use a variety of strategies for monitoring student progress and to adjust their strategies and expectations to fit the level of language proficiency of the English language learner. With beginning language learners, emphasis should be on comprehension of named things and actions; more advanced students should begin demonstrating understanding of connections between things and subsequently their ability to articulate the relationship between ideas. Content area teachers should work closely with the bilingual/ESL teacher to identify instructional and assessment strategies that are appropriate to all aspects of the student's development and that permit teachers to expand expectations gradually over the school year.

Successful strategies for monitoring student progress in the content areas include:

- Providing periodic checks for understanding.
- Promoting nonverbal as well as verbal participation.
- Encouraging students to think aloud to practice concepts.
- Modeling responses that provide appropriate information using correct grammar.
- Breaking tasks down into sequentially developed parts using simple language.
- Structuring questions to student's language level (e.g., begin with yes/no and embedded questions and advance to open-ended questions).
- Avoiding use of questioning techniques that contain negative structures, such as "all but", "everything is _____ except", or "one is NOT the reason/cause."
- Rephrasing questions and information when students do not understand the first time.
- Observing student's behaviors for evidence that they understand assignments, directions, and instructions.
- Reviewing student's work for evidence that they understand assignments, directions, and instructions.

- Using visual reviews (e.g., lists and charts) that enable students to show what they know and can
 do
- Providing increased "wait time" to allow students time to process questions before responding.
- Providing modified "double" grading to assess the content as well as the structure of responses.

Four over-arching strategies are most effective for assisting students from a background of limited English proficiency (LEP) to meet success in content area classes. These strategies include the following:

- integrate activities into thematic units
- tap students' prior knowledge and experience
- teach learning strategies and scaffold complex tasks
- group students into a variety of learning groups

Academically Talented Learners

Academically talented learners, also known as "gifted learners" or "gifted and talented," are oftentimes overlooked in classroom instruction. Consequently, some students find school boring and uninspiring due to knowing many of the concepts being introduced in the regular classroom. The exceptionally able or gifted students are those who

- demonstrate a high degree of intellectual, creative, and/or artistic ability
- possess exceptional leadership skills
- excel in specific fields
- function above grade level
- need accommodations or special instruction to achieve at levels commensurate with a challenge to his or her abilities
- have the ability to grasp concepts rapidly and/or intuitively
- have an intense curiosity about principles and how things work
- have the ability to generate theories and hypotheses and purse methods of inquiry
- produce products that express insight, creativity and/or excellence

In the past, the term "gifted" described people with high scores on I.Q. tests. Today, new concepts connected to creative thinking models and multiple intelligences have expanded the definition of intelligence to include other dimensions. Giftedness reflects a multifaceted, multicultural, and multidimensional perspective and is defined by aptitude, traits, and behaviors rather than changeless test performance. These students are found in all cultural groups and across all economic levels. Increased understanding of culturally determined and environmentally affected behaviors will enable teachers and administrators to interpret performance indicators of creative potential.

Strategies for Academically Talented Learners

Gifted students are more likely to develop study and production skills, experience success and struggle, and feel challenged in a classroom setting that encourages learners to master information more quickly.

Adaptation strategies include the following:

- interdisciplinary and problem-based assignments with planned scope and sequence
- advance, accelerated, or compacted content
- abstract and advanced higher-level thinking
- allowance for individual student interests
- assignments geared to development in areas of affect, creativity, cognition, and research skills
- complex, in-depth assignments
- diverse enrichment that broadens learning
- variety in types of resources
- community involvement
- cultural diversity
- internship, mentorship, and other forms of apprenticeship

Miscellaneous/All Learners

Adaptations in the Classroom Environment

- Classical background music to enhance concentration
- Variety of workspace arrangement (individual, small, and large group)
- Privacy work seats carrels
- Conferencing area for one-on-one teacher/student interaction
- Charts and poster to enhance memory and self-reliance
- Organization tools labeled bins or cabinets for materials, assignments, or supplies
- Seating arrangements minimize distractions, provide positive student models

Adaptive Equipment and Instructional Materials

- Leveled classroom libraries
- Books on tape
- Directions on tape
- Tape recorders
- Simplified written directions
- Adjusted formats of text
- Computers with adaptive software
- Speech synthesizer
- Communication boards
- Close-captioned video/television

Works Consulted

The Technology Curriculum of the following districts were reviewed during the development of this curriculum document:

- Riverton Public Schools, Riverton, NJ
- Mount Olive School District, Mount Olive, NJ
- Mount Holly School District, Mount Holly, NJ
- Maple Shade School District, Maple Shade, NJ