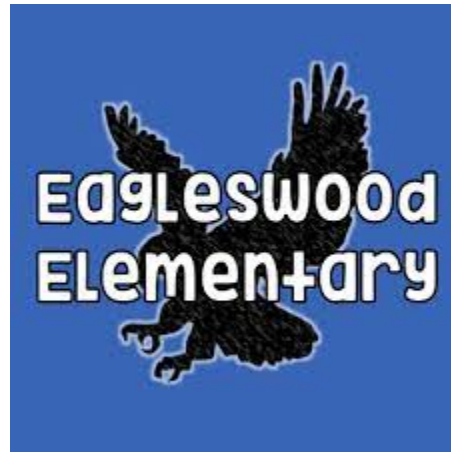


Eagleswood Township Elementary
School District



Computer Curriculum

Grade 4th

Adopted by the Eagleswood
Board Of Education
August 15, 2022

Content Area: Technology
Grade Level: 4th
Date Created: August 2022
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Pacing Guide

Unit 1: Computer Navigation Basics/Computer Basics/Word Processing/ Spreadsheet Basics/ Multimedia Presentation Basics	Marking Period 1
Unit 2: Digital Citizenship/Web Browsing	Marking Period 2
Unit 3: Technology Education/ Engineering/ Design & Computation Thinking	Marking Period 3
Unit 4: STEAM Integration	Marking Period 4

Unit 1- NJSLS- [Computer Science and Design Thinking](#)

NJSLS for Technology

- 8.1.5.CS.2: Model how computer software and hardware work together as a system to accomplish tasks.
- 8.1.5.NI.2: Describe physical and digital security measures for protecting sensitive personal information.
- 8.1.5.IC.2: Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.
- 8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate program development.
- 8.1.5.AP.5: Modify, remix, or incorporate pieces of existing programs into one's own work to add additional features or create a new program.

NJSLS for ELA

- NJLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- NJLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- NJLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating an

understanding of the subject under investigation. NJSLSA.W8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

- NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.SL5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- RI.4.2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- RI.4.3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- RI.4.5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- W.4.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- W.4.7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- SL.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- L.4.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.

NJSLS for Math

- MP1 Make sense of problems and persevere in solving them.
- MP4 Model with mathematics.
- MP5 Use appropriate tools strategically.
- MP6 Attend to precision.
- 4.NBT.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on the meaning of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

NJSLS for Science

- 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. The performance expectations above were developed using the following elements from

NJSLS for Social Studies

- 6.1.4.D.2 Summarize reasons why various groups, voluntarily and involuntarily, immigrated to New Jersey and America, and describe the challenges they encountered.

NJSLS for 21st Century Life and Careers (standard 9)

- CRP2 Apply appropriate academic and technical skills.
- 9.1.4.A.2 Identify potential sources of income.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Unit 1

Central Idea/ Enduring Understanding

Students will...

- Technology is constantly changing and requires continuous learning of new skills
- Selection of technology should be based on personal and/or career needs assessment.
- Navigation tools are convenient ways for users to access and manipulate various computer software, programming, and applications.
- Technology use can have positive or negative impact on both users and those affected by their use.
- Spreadsheets are valuable to everyday users, when there is a proficient understanding of its use.
- A computer is an adaptable tool for organizing information and solving problems that facilitate lifelong learning.

Guiding 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?
- 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, and use the navigation buttons?
- 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.
- How can presentation software be used to tell stories and present ideas and information?
- How to identify a story's sequence and view slideshow in presentation software?

Content

Skills (objectives)

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, link, plagiarism, copyright, multimedia, graphic, clipart, layout, graphic box, header/footer, spreadsheet, row, column, cell, worksheet, chart, graph, data, sum, sort, troubleshoot}

Microsoft Word/ Google Docs

(8.1.5.A.2, 8.1.2.A.3, 8.2.5.E.2)

Microsoft PowerPoint/ Google Slides

Microsoft Excel/Google Pages

Basic computer troubleshooting
(CRP2)

- To navigate through program menus.
- To use toolbars.
- To use online help and mouse over text.
- To select software according to its appropriateness to a task.
- Understand the connection between menu icons and toolbar buttons.
- Explore software programs.
- Additional experience keying letters and learning to form words.
- 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.
- 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.
- To use basic technology vocabulary.
- To perform online searches using search engines search engines.
- Perform both real text and keyword searches.
- Perform category searches to find information.
- To determine the success of a search.
- To recognize privacy issues involved with providing personal information on web pages.
- Communicate with students from other classes, schools, states or countries.
- How to format cell data, including number, date, and general formats.
- How to use the 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.
- That presentation software is used to make slideshow on a computer.

	<ul style="list-style-type: none"> ● 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 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, transition effects to a slide presentation.
Performance Tasks <ul style="list-style-type: none"> ● Open-Ended Problems ● Project-Based Assessment ● Self-Assessment 	Other Evidence of Learning <ul style="list-style-type: none"> ● Class-Work Review ● Teacher Observation
Learning Opportunities and Strategies <ul style="list-style-type: none"> ● Modeling of task ● Follow multi-step instruction ● Project example ● Direct Instruction 	Resources <ul style="list-style-type: none"> ● Computer Lab ● Multimedia software ● Smart board/projector ● MS PowerPoint/ Google Slides ● Microsoft Publisher/Microsoft Excel, Google Pages ● Google Hangouts, Mystery Hangouts, Google Earth, etc.

Unit 2- NJSLS- [Computer Science and Design Thinking](#)

NJSLS for Technology

- 8.1.5.CS.2: Model how computer software and hardware work together as a system to accomplish tasks.
- 8.1.5.NI.2: Describe physical and digital security measures for protecting sensitive personal information.
- 8.1.5.IC.2: Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.
- 8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate

program development.

- 8.1.5.AP.5: Modify, remix, or incorporate pieces of existing programs into one's own work to add additional features or create a new program.

NJSLS for ELA

- NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- NJSLSA.W2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating an understanding of the subject under investigation. NJSLSA.W8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.SL5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
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- W.4.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- W.4.7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- W.4.8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- SL.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g., visually, quantitatively, and orally).
- SL.4.5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
- L.4.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.

NJSLS for Math

- MP1 Make sense of problems and persevere in solving them.
- MP4 Model with mathematics.
- MP5 Use appropriate tools strategically.
- MP6 Attend to precision.

- 4.NBT.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on the meaning of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

NJSLS for Science

- 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. The performance expectations above were developed using the following elements from

NJSLS for Social Studies

- 6.1.4.D.3 Evaluate the impact of voluntary and involuntary immigration on America's growth as a nation, historically and today.

NJSLS for 21st Century Life and Careers (standard 9)

- CRP2 Apply appropriate academic and technical skills.
- 9.1.4.A.2 Identify potential sources of income.
- 9.2.4.A.3 Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.

Unit 2

Central Idea/ Enduring Understanding

Students will...

- Develop an understanding of ownership of print and nonprint information.
- Understand the need for and use of copyrights.
- Analyze the resource citations in online materials for proper use.
- Research technologies that have changed due to society's changing needs and wants.
- Demonstrate an understanding of the need to practice cyber safety, cyber security, and cyber ethics when using technology and social media.
- Understand digital citizenship and demonstrate an understanding of the personal consequences of

Guiding Questions

- How can a secure password help you protect your private information?
- How do you create a positive online community?
- What is spam, and what can you do about it?
- How do you cite different types of online sources?
- How can photos be changed on the computer, and how can that affect your feelings about the way you look?
- 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

<p>inappropriate use of technology and social media.</p> <ul style="list-style-type: none"> • Technology use can have positive or negative impact on both users and those affected by their use. • A computer is an adaptable tool for organizing information and solving problems that facilitate lifelong learning. 	<p>navigation buttons?</p>
<p>Content</p> <p>Basic computer troubleshooting (CRP2) Internet Safety/Digital citizenship/Appropriate Searching (8.1.5.D.1, 8.1.5.D.3, 8.1.5.D.4) Source, citation, bibliography (8.1.5.D.2, 8.2.5.B.4, 8.2.5.B.5, 8.2.5.B.6)</p>	<p>Skills (objectives)</p> <ul style="list-style-type: none"> • Identify the characteristics of strong passwords • Apply characteristics of strong passwords to create new passwords • Create secure passwords with their family members • Establish expectations and norms for the group related to appropriate online behavior • Participate responsibly and respectfully in an online community • Collaborate on a classroom motto about digital citizenship • Define what spam is • Explore strategies for safely managing unwanted messages • Identify different forms of spam • Explain the value of giving proper citations • Name the components of an MLA style citation for different types of websites • Create MLA style citations for online articles and professional sites • Recognize that photos can be altered digitally, and consider the upsides and downsides of this practice • Discuss how photo alteration can distort our perceptions and affect our self-image • Analyze how advertising uses photo alteration to help sell products.

	<ul style="list-style-type: none"> ● To perform online searches using search engines search engines. ● Perform both real text and keyword searches. ● Perform category searches to find information. ● To determine the success of a search. ● To recognize privacy issues involved with providing personal information on web pages. ● Communicate with students from other classes, schools, states or countries.
Performance Tasks <ul style="list-style-type: none"> ● Open-Ended Problems ● Project-Based Assessment 	Other Evidence of Learning <ul style="list-style-type: none"> ● Class-Work Review ● Teacher Observation
Learning Opportunities and Strategies <ul style="list-style-type: none"> ● Digital Citizenship Pledge ● Open-Ended Problems ● Project based Assessment ● Create strong passwords ● SPAM: It's not just for breakfast ● How to Cite a Site (EasyBib) ● Picture Perfect (VIDEO) 	Resources <ul style="list-style-type: none"> ● Handouts ● Models ● Presentations ● Technology/engineering websites ● Smartboard/projector ● Real Beauty TED Talk ● Common Sense Education ● EasyBib

Unit 3- NJSLS- [Computer Science and Design Thinking](#)

NJSLS for Technology

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- 8.1.5.IC.2: Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.
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- MP4 Model with mathematics.

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NJSLS for Science

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- 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. The performance expectations above were developed using the following elements from

NJSLS Grade for Social Studies

- 6.1.4.C.16 Explain how creativity and innovation resulted in scientific achievement and inventions in many cultures during different historical periods.
- 6.1.4.C.17 Determine the role of science and technology in the transition from an agricultural society to an industrial society, and then to the information age
- 6.1.4.C.18 Explain how the development of communications systems has led to increased collaboration and the spread of ideas throughout the United States and the world.

NJSLS for 21st Century Life and Careers (standard 9)

- CRP3 Attend to personal health and financial well-being.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- 9.2.4.A.1 Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.
- 9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.

Unit 3

Central Idea/ Enduring Understanding

Students will...

- 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

Guiding Questions

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

perspectives.	
Content <ul style="list-style-type: none"> • Basic computer troubleshooting (CRP2) • Technology is created through design process 	Skills (objectives) <ul style="list-style-type: none"> • Investigate factors that influence the development and function of technology products and systems. • Explain the purpose of system and subsystem. • Discuss roles of producers and consumers • Discuss disposal of technology and effects on the environment. • Discuss positive/negative effects of products on living creators and the environment. • Discuss roles of producers and consumers.
Performance Tasks <ul style="list-style-type: none"> • Open-Ended Problems • Project-Based Assessment 	Other Evidence of Learning <ul style="list-style-type: none"> • Class-Work Review • Teacher Observation
Learning Opportunities and Strategies <ul style="list-style-type: none"> • Ozobots • Bitsbox • Hour of Code • Google CS First 	Resources <ul style="list-style-type: none"> • Handouts • Models • Presentations • Technology/engineering websites • Smartboard/projector

Differentiation Strategies			
High Achieving Students	On Grade Level Students	Struggling Students	Students with Special Needs
Create a PowerPoint presentation summarizing the lesson or introducing a topic Students create a Prezi on a given topic and present it to the class. Differentiate fact from opinion and fix the	Differentiate fact from opinion in the reading. Visual learners create a graphic organizer of the topic. Auditory learners give an oral report. Break some students into reading groups to	Offer alternate assessments/ assignments Adapt reading levels Provide textbooks for visual and word learners. Visual learners create a	Offer alternate assessments/ assignments Match vocabulary words to definitions. Read a passage of text and answer related questions. Provide textbooks for

<p>opinions to make them facts.</p> <p>Use of multiple texts, supplementary materials and computer programs</p> <p>Independent and small group projects chosen by students based on interest</p> <p>Student centered activities with the teacher as a guide</p> <p>Use of Jigsaw</p> <p>Think. Pair. Share</p> <p>Carousel activity to review or introduce material</p> <p>Portfolios for Essay</p> <p>Writing E-pals to share essays</p> <p>Google Classroom</p> <p>Google docs to turn in and complete work</p> <p>Adapt reading levels</p>	<p>discuss the assignment.</p> <p>Allow students to read individually if preferred.</p> <p>Use of student created charts and models</p> <p>Adaptive assessments that get easier or harder depending on how a student is performing.</p> <p>Learning activities in small groups, which are designed around student strengths and weaknesses so that they can tutor each other.</p> <p>Think. Pair. Share</p> <p>Allow for individual, partner and group work</p> <p>Carousel activity to review or introduce material</p> <p>Google Classroom</p>	<p>graphic organizer of the topic.</p> <p>Break some students into reading groups to discuss the assignment.</p> <p>Supply note taking organizers and peer buddies</p> <p>Assign reading partners</p> <p>Choral reading/ answering</p> <p>Supply highlighted texts & worksheets</p> <p>Think. Pair. Share</p> <p>Google Classroom</p> <p>Carousel activity to review or introduce material</p> <p>Allow students to read individually if preferred.</p> <p>Have students define terms with pictures rather than words.</p> <p>Excel charts to compile information</p> <p>Kahoot to introduce/conclude lessons</p>	<p>visual and word learners.</p> <p>Allow auditory learners to listen to audio books.</p> <p>Give kinesthetic learners the opportunity to complete an interactive assignment online.</p> <p>Visual learners create a graphic organizer of the topic.</p> <p>Break some students into reading groups to discuss the assignment.</p> <p>Allow students to read individually if preferred.</p> <p>Funbrain: quizzes/puzzles/games</p> <p>Kahoot to introduce/conclude lessons</p> <p>Internet Scavenger Hunts</p> <p>Google Classroom</p> <p>Google docs to turn in and complete work</p>
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NOTE: Teachers should follow the specific curricular accommodations for students with individualized learning plans such as IEPs and 504

Accommodations for Various Learners

Students that are English Language Learners:

1. Retell content information in easier English
2. Use simple sentence structure (verb-subject-object)
3. Use high frequency words
4. Avoid negative phrasing such as all, but, except
5. Actively help students build connections and associations in order to access background knowledge or previously taught information
6. Present students with written as well as oral messages (provide outlines or a copy of the notes of a classmate)
7. Always write assignments on the chalkboard
8. Modify assignments (fewer questions or fewer vocabulary)
9. Provide taped lessons
10. Provide concrete examples of vocabulary words through the use of visuals
11. Model Think Alouds to increase student comprehension
12. Directly teach learning strategies
13. Provide small group instruction
14. Provide preferential seating
15. Provide individual or study carrel
16. Use color overlays or templates
17. Provide oral reading of test questions in English
18. Provide oral reading of reading passages in English
19. Provide frequent monitored breaks
20. Provide extended time
21. Assess whether the student has the necessary prerequisite skills. Determine whether materials are appropriate to the student's current functioning levels

Students with Disabilities:

1. Seat student near model (student/teacher)
2. Seat student near instruction
3. Use a highlight marker to identify key words, phrases, or sentences for student to read
4. Provide manipulative objects for student to use in problem solving
5. Have peers deliver directions or explanations
6. Buddy in class to assist and clarify
7. Provide specific guidelines for prewriting
8. Provide mnemonic devices
9. Repeat major points of information
10. Provide visual cues (posters, number lines, gestures, use of technology)
11. Provide study guides
12. Highlight new vocabulary and key words
13. Use advance organizers
14. Allow for frequent breaks (sensory/brain)
15. Be aware of student's preferred learning style and provide matching instruction materials

Students listed as Gifted & Talented:

1. Modify the content through acceleration, compacting, variety, reorganization, flexible pacing, and the use of more advanced or complex concepts, abstractions, and materials
2. Provide content that is thematic, broad based, and integrative rather than just single-subject areas
3. Provide opportunities to generalize, integrate, and apply ideas to content
4. Encourage students to move through content at their own pace
5. Provide enrichment activities for content such as critical thinking, problem finding, and problem solving
6. Modify process to be more intellectually demanding that require a higher level of response or open-ended questions that stimulate inquiry, active exploration, and discovery
7. Require students to think about topics in more abstract and complex ways
8. Activity selection should be based on student interests and encourage self directed learning
9. Align objectives with Bloom's Taxonomy
10. Modify the learning environment that encourages inquiry and independence. It should include a wide variety of materials, provides some physical movement, and connects the school experiences with the greater world
11. Modify product expectations and student responses. They should demonstrate what they have learned in a wide variety of forms that both reflect knowledge and ability to manipulate ideas
12. Assess curriculum effectiveness by accelerating the mastery of basic skills through testing-out procedures and reorganization of the curriculum according to higher level skills and concepts.

Students with 504 Plans:

Environmental Strategies

- Provide a structured learning environment
- Possible adapting of non-academic times such as lunch, recess, and physical education
- Change student seating
- Alter location or personal or classroom supplies for easier access or to minimize distraction
- Provide sensory breaks
- Provide a written or picture schedule

Presentation Strategies

- Record lessons so the student can review
- Use computer-aided instruction and other audiovisual equipment
- Select alternative textbooks, workbooks, or provide audio books
- Highlight main ideas and supporting details in the book

Behavioral Strategies

- Use behavioral management techniques consistently within a classroom and across classes
- Implement behavioral/academic contracts
- Utilize positive verbal and/or nonverbal reinforcements
- Utilize logical consequences
- Establish a home/school communication system for behavior monitoring
- Cooperatively generate rules and consequences for classroom behavior
- Reinforce self-monitoring and self-recording of behaviors

Organizational Strategies

- Model and reinforce organizational systems (i.e. color-coding)
- Write out homework assignments, check student's recording of assignments
- Set time expectations for assignments

- Prioritize drill and practice activities for relevance
- Vary the method of lesson presentation using multi-sensory techniques
- Ask student to repeat/paraphrase context to check understanding
- Simplify and repeat instructions
- Vary instructional pace
- Reinforce the use of compensatory strategies, i.e. pencil grip, mnemonic devices, “spell check”
- Reinforce study skill strategies (survey, read, recite, review)
- Pre-teach and/or re-teach important concepts
- Prepare advanced organizers/study guides for new material

- Provide clues such as clock faces indicating beginning and ending times
- Teach study/organizational skills

Evaluation Methods

- Limit amount of material presented on page
- Provide a sample or practice test
- Provide for oral testing
- Provide tests in segments so that student hands in one segment before receiving the next part
- Provide personal copy of test tools and allow for color-coding/highlighting
- Adjust time for completion
- Modify weights of tests when grading

Students that are At Risk:

1. Provide a structured learning environment
2. Provide sensory breaks
3. Change student seating
4. Select alternative textbooks, workbooks, or provide audio books
5. Vary the method of lesson presentation using multi-sensory techniques
6. Provide small group or individual instruction
7. Reinforce the use of compensatory strategies
8. Reinforce self-monitoring and self-reflecting strategies
9. Buddy in class to assist and clarify
10. Actively help students build connections and associations in order to access background knowledge or previously taught information
11. Directly teach learning strategies
12. Repeat major points of information
13. Provide visual cues (posters, number lines, gestures, use of technology)

Universal Design

The goal of UDL is to use a variety of teaching methods to remove any barriers to learning and give all students equal opportunities to succeed. It’s about building in flexibility that can be adjusted for every student’s [strengths](#) and needs. That’s why UDL benefits all kids.

- Universal Design for Learning (UDL) is a way of thinking about teaching and learning that helps give all students an equal opportunity to succeed.
- This approach offers flexibility in the ways students access material, engage with it and show what they know.
- Developing lesson plans this way helps all kids, but it may be especially helpful for kids with learning and attention issues.

[The Difference Between UDL and Traditional Education](#)

UDL in the Classroom (5 Practices)

Universal Design for Learning

Recognition Networks

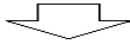
The "what" of learning



How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks.



Present information and content in different ways



**Principle #1:
Provide Multiple Means of
Representation**

Strategic Networks

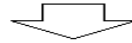
The "how" of learning



Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.



Differentiate the ways that students can express what they know



**Principle #2:
Provide Multiple Means of
Action and Expression**

Affective Networks

The "why" of learning



How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.



Stimulate interest and motivation for learning



**Principle #3:
Provide Multiple Means of
Engagement**

Works Consulted

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

Mount Olive School District, Mount Olive, NJ

Pemberton School District, Pemberton, NJ

Westampton School District, Westampton, NJ