Washington Township School District

The mission of the Washington Township Public Schools *is to provide a safe, positive, and progressive educational environment that provides opportunity for all students to attain the knowledge and skills specified in the NJ Learning Standards at all grade levels, so as to ensure their full participation in an ever-changing world as responsible, self-directed and civic-minded citizens.*

Course Title:	**Digital Literacy 7**
Grade Level(s):	7

Duration:	*Full Year:*		*Semester:*		*Marking Period:*	**x**
Course Description:	Digital Literacy 7, a marking period course for seventh grade students, will further develop students' programming skills by introducing text-based coding. Also, this course will deepen students' understanding of previously learned concepts by further investigating technology's impact on careers, society, and individuals while examining issues of bias and accessibility. In addition, students will practice using proper information and media skills while researching career options and developing final presentations that will assess their understanding of evaluating information, search skills, and technology publishing and design. This project based class will ask students to present several pieces of work to summarize findings and demonstrate proficiency of technological skill. Students will be expected to effectively use the internet, presentation software, spreadsheet software, coding software, and information databases as part of this course.					
Grading Procedures:	Examples of grading procedures include scoring rubrics, performance scales, assessments, completion of assignments, class participation, self-assessments, and teacher observation. **Summative Grading Category - 70% and Supportive Grading Category - 30%**					
Primary Resources:	Examples of primary resources include Learning.com, internet-based programs, Microsoft Office programs, text-based coding programs, Office 365 Apps, and teacher-created resources.					

Washington Township Principles for Effective Teaching and Learning

- Implementing a standards-based curriculum
- Facilitating a learner-centered environment
- Using academic target language and providing comprehensible instruction
- Adapting and using age-appropriate authentic materials
- Providing performance-based assessment experiences
- Infusing 21st century skills for College and Career Readiness in a global society

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Under the Direction of:	Dr. Steve Gregor

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BOE Approval: _____

Unit Title: 1: Digital Citizenship and Impacts of Computing

Unit Description:
Students will investigate the positive and negative uses and consequences of the Internet. This unit focuses on how computer technologies alter a person's activities and career options. Students will analyze the benefits and consequences of easy access to technology. Students will also focus on how computing technologies are not available to everyone at the same level while investigating issues of bias and accessibility. As part of this understanding, students will examine the impact of social media as a tool with both positive and negative functions. At the conclusion of this unit, students will be able to discuss how digital footprints and information shared online can be used to form reputations about people and organizations.

Unit Duration: 3.5 weeks

Desired Results

Standard(s):
Impacts of Computing: 8.1.8.IC
Data & Analysis: 8.1.8.DA
Digital Citizenship: 9.4.8.DC

Indicators:
8.1.8.IC.1: Compare the trade-offs associated with computing technologies that affect an individual's everyday activities and career options.
8.1.8.IC.2: Describe issues of bias and accessibility in the design of existing technologies.
8.1.8.DA.1: Organize and transform data collected using computational tools to make it usable for a specific purpose.
9.4.8.DC.3: Describe tradeoffs between allowing information to be public (e.g., within online games) versus keeping information private and secure
9.4.8.DC.4: Explain how information shared digitally is public and can be searched, copied, and potentially seen by public audiences.
9.4.8.DC.5: Manage digital identity and practice positive online behavior to avoid inappropriate forms of self-disclosure.
9.4.8.DC.6: Analyze online information to distinguish whether it is helpful or harmful to reputation.

Understandings:
Students will understand that…

- Computing technologies have an impact on society.
- Computing technologies can be designed and adapted to meet the needs of a user.
- Individuals and organizations need to weigh the consequences and benefits of making information public.
- Online information can both benefit and harm an individual or organization's reputation.
- Digital footprints are used to create judgements of individuals and organizations.
- Data can be organized and shared in a variety of ways to meet the needs of specific purposes.

Essential Questions:

- How can computers be adapted to meet the needs of users?
- How will future computing technologies operate based on adaptations of the future?
- What information should or should not be shared online?
- What are the consequences of sharing information online?
- How can we use data and online technologies to communicate information?

Assessment Evidence

Performance Tasks:

- Internet Graphic Organizers Benefits and Consequences
- Digital Footprint PSAs

Other Evidence:
Learning.com Assessments
Formative Assessments – online platforms
In person and asynchronous discussions

- Internet usage spreadsheet/graphs	

Benchmarks:
Digital Footprint PSA
Unit Assessment

Learning Plan

Learning Activities:

- Nearpod lessons: “The Power of Digital Footprints”, “Social Media”, “Social Media and Digital Footprint”, “Social Media and Social Action”
- Flocabulary Lessons: “Oversharing”
- Learning.com Lessons: “Sharing Safely Online”
- In class discussions
- Collaborative work: Design graphic organizers on benefits and consequences on Internet
- Working together scenarios- online vs. In person tradeoff Smart Art Chart
- Newsela articles: social media and news, careers
- Analyze statistics on technology usage in different communities
- Create tables and graphs in Excel on internet usage
- Collaborative work: Analyze digital footprints and make impressions
- Design PSAs using different media formats on how to create a positive digital footprint

Resources:
Online Resources:
Lessons:
Nearpod, Brainpop, Flocabulary, Learning.com,

Other online Resources:
Newsela
Office 365 software and productivity tools
Canva
PowerPoint
Word
Excel
Schoology discussions and assignment upload spots
Formative assessment tools

Hardware:
Projectors/Interactive TVs, computers

Unit Modifications for Special Population Students	
Advanced Learners	Encouraged to develop video based and interactive PSAs. Provide opportunity to develop their own examples of good and bad digital footprints.
Struggling Learners	Struggling learners will be paired with others during collaborative work to help support the learning process. Projects will be chunked. Small group reteaching as needed. Use of partially started spreadsheet templates to allow students to focus on smaller chunks of information. Provide PSA templates and samples to help students model and structure.
English Language Learners	For English Language Learners, options are available, such as providing the students with screencast videos that show how projects are completed, in place of the use of written directions. An emphasis can be placed on the use of videos and illustrations to teach topics. Written directions and articles are provided digitally so they can be translated as needed. Students can represent redesigns graphically instead of using text.
Learners with an IEP	Each special education student has an Individualized Educational Plan (IEP) that details the specific accommodations, modifications, services, and support needed to level the playing field. This will enable that student to access the curriculum to the greatest extent possible in the least restrictive environment. These include: • Variation of time: adapting the time allotted for learning, task completion, or testing • Variation of input: adapting the way instruction is delivered • Variation of output: adapting how a student can respond to instruction • Variation of size: adapting the number of items the student is expected to complete • Modifying the content, process or product Additional resources are outlined to facilitate appropriate behavior and increase student engagement. The most frequently used modifications and accommodations can be viewed here. Teachers are encouraged to use the Understanding by Design Learning Guidelines (UDL). These guidelines offer a set of concrete suggestions that can be applied to any discipline to ensure that all learners can access and participate in learning opportunities. The framework can be viewed here www.udlguidelines.cast.org
Learners with a 504	Refer to page four in the Parent and Educator Resource Guide to Section 504 to assist in the development of appropriate plans.

Interdisciplinary Connections

Indicators:

For ***Unit One, Digital Citizenship and Impacts of Computing*** relates to the content areas for English Language Arts. The indicators for these standards are specified below:

NJSLS for English Language Arts: NJSLSA.R7, R8, NJSLSA.W1, W4, W6-9

Integration of 21st Century Skills

Indicators:

For ***Unit One, Digital Citizenship and Impacts of Computing,*** the following practices can be integrated into the classroom in order to prepare students for 21st Century Skills.

Critical Thinking & Problem Solving: Students will analyze digital footprints for positive and negative notes. Students will design graphic organizers comparing the pros and cons of the Internet.

Communication: Students will share their designs and presentations with others.

Collaboration: Students can contribute to both group and class discussions as well as collaborate on ideas pertaining to the content of the unit. Students will work together to brainstorm, create graphic organizations, and to analyze digital footprints.

Creativity & Innovation: Students will develop presentations that illustrate their PSAs and spreadsheets

Unit Title: 2- Coding and Programming

Unit Description:
Students will further develop their coding skills by learning to use a text-based programming language to write code to create computer programs. Essential coding concepts during this unit include variables, conditions, and loops. The unit will also explore the role of programming in our technological world.

Unit Duration: 3 weeks

Desired Results

Standard(s):
8.1.8.AP: Algorithms and Programming

Indicators:
8.1.8.AP.1: Design and illustrate algorithms that solve complex problems using flowcharts and/or pseudocode.
8.1.8.AP.2: Create clearly named variables that represent different data types and perform operations on their values.
8.1.8.AP.3: Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.
• 8.1.8.AP.4: Decompose problems and sub-problems into parts to facilitate the design, implementation, and review of programs.
• 8.1.8.AP.5: Create procedures with parameters to organize code and make it easier to reuse
• 8.1.8.AP.6: Refine a solution that meets users' needs by incorporating feedback from team members and users.
• 8.1.8.AP.7: Design programs, incorporating existing code, media, and libraries, and give attribution. •
8.1.8.AP.8: Systematically test and refine programs using a range of test cases and users.
• 8.1.8.AP.9: Document programs in order to make them easier to follow, test, and debug.

Understandings:
Students will understand that…

- Programming involves writing code to create computer applications and programs. Students will understand that almost all industries need software developers to create software programs using programming languages.
- A text-based programming language entails entering text and characters to write code to create programs, such as the programming language, Python.
- A visual programming language, such as Scratch, requires stacking command blocks that contain scripts in order to create programs, whereas, a text-based programming language, such as Python, involves entering text commands to write codes to create programs.

Essential Questions:

- What is programming and how is it used in industries?
- What is a text-based programming language?
- How does a text-based programming language differ from a visual programming language?
- How do variables control code?
- How do loops make coding more efficient?
- How do conditionals allow coding to react to user input?

Assessment Evidence

Performance Tasks:
Learning.com Python projects

Other Evidence:
Learning.com lessons
Other online coding platform practice

Benchmarks:
End of unit independent Python project

Learning Plan

Learning Activities:
Introductory lessons:
Python components
Variables
Integers
Loops
Conditionals

Learning.com guided lessons
Independent extension activities on other platforms: Code.org, Build Something Different, Code Combat, Ozario

Formative assessment checks for vocabulary
Online guided discussions

Resources:
Online resources:
Nearpod guided lessons, Learning.com, Code.org, BuildSomethingDifferent.com, codecombat.com, Ozario, Formative, Schoology

Equipment:
Computers
Projectors/ Interactive TVs

Unit Modifications for Special Population Students	
Advanced Learners	Advanced learners will be expected to continue moving forward at their own pace, completing increasingly difficult coding problems and simulations. On final project, students will be encouraged to include nested conditionals and multiple variables to perform more advanced functions.
Struggling Learners	Struggling learners will be expected to move forward at their own pace, working with support of small group instruction and chunking to complete projects. On final project, students will be given starter code to manipulate.
English Language Learners	For English Language Learners, options are available, such as providing the students with screencast videos that show how projects are completed, in place of the use of written directions. An emphasis can be placed on the use of videos and illustrations to teach topics. Written directions and articles are provided digitally so they can be translated as needed. Students can represent redesigns graphically instead of using text.
Learners with an IEP	Each special education student has an Individualized Educational Plan (IEP) that details the specific accommodations, modifications, services, and support needed to level the playing field. This will enable that student to access the curriculum to the greatest extent possible in the least restrictive environment. These include: • Variation of time: adapting the time allotted for learning, task completion, or testing • Variation of input: adapting the way instruction is delivered • Variation of output: adapting how a student can respond to instruction • Variation of size: adapting the number of items the student is expected to complete • Modifying the content, process or product Additional resources are outlined to facilitate appropriate behavior and increase student engagement. The most frequently used modifications and accommodations can be viewed here. Teachers are encouraged to use the Understanding by Design Learning Guidelines (UDL). These guidelines offer a set of concrete suggestions that can be applied to any discipline to ensure that all learners can access and participate in learning opportunities. The framework can be viewed here www.udlguidelines.cast.org
Learners with a 504	Refer to page four in the Parent and Educator Resource Guide to Section 504 to assist in the development of appropriate plans.

Interdisciplinary Connections

Indicators:

The course content is related to multiple content areas that are aligned with the NJSLS (New Jersey Student Learning Standards) and the ISTE (International Society for Technology in Education) Standards.

Unit Two Programming, relates to the content areas for Mathematics and the ISTE standards for computational thinking and innovative design.

The indicators for these standards are specified below:

NJSLS: 7.NS 7.EE 7.G

ISTE: 1-4, 1-5

Integration of 21st Century Skills

Indicators:

For ***Unit Two, Programming,*** the following practices can be integrated into the classroom in order to prepare students for 21st Century Skills.

Critical Thinking & Problem Solving: Students can exhibit problem-solving skills by developing programs by using text-based coding.

Communication: Students can convey their ideas through the programs they create by using a text-based programming language.

Collaboration: Students can contribute to both group and class discussions as well as collaborate on ideas pertaining to the content of the unit.

Creativity & Innovation: Students can derive at creative and unique ideas for developing games, animations, etc. by using text-based coding.

Unit Title: 3 : Information and Technology Literacy

Unit Description: In this unit, career research will merge with technology skills. Students will learn about effective searching and evaluation of sources while creating published products on their findings. Students will access a variety of sources to learn about future career options while evaluating the role technology and the environment play in these careers. Students will create infographics and presentations with embedded graphs that summarize their findings of the source quality and the future of their chosen career.

Unit Duration: 3.5 weeks

Desired Results

Standard(s):
Information Literacy: 9.4.8.IML
Technology Literacy: 9.4.8.TL

Indicators:
• 9.4.8.IML.1: Critically curate multiple resources to assess the credibility of sources when searching for information.
• 9.4.8.IML.2: Identify specific examples of distortion, exaggeration, or misrepresentation of information.
• 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b).
• 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations.
• 9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively
9.4.8.IML.6: Identify subtle and overt messages based on the method of communication communicate the data.
• 9.4.8.IML.7: Use information from a variety of sources, contexts, disciplines, and cultures for a specific purpose
• 9.4.8.IML.8: Apply deliberate and thoughtful search strategies to access high-quality information on environmental issues.
• 9.4.8.IML.9: Distinguish between ethical and unethical uses of information and media
• 9.4.8.IML.10: Examine the consequences of the uses of media (e.g., RI.8.7).
• 9.4.8.IML.11: Predict the personal and community impact of online and social media activities

9.4.8.TL.1: Construct a spreadsheet in order to analyze multiple data sets, identify relationships, and facilitate data-based decision-making.
9.4.8.TL.2: Gather data and digitally represent information to communicate a real-world problem
9.4.8.TL.3: Select appropriate tools to organize and present information digitally.
9.4.8.TL.4: Synthesize and publish information about a local or global issue or event
9.4.8.TL.5: Compare the process and effectiveness of synchronous collaboration and asynchronous collaboration.
9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Understandings:
Students will understand that…

- Much of the information online is biased, skewed, or unreliable.
- It is important to check for reliable sources, and to find multiple sources to verify information.
- Digital visualizations can be created to help easily convey information.
- Social media and advertisements often have hidden meanings and messages.
- Social media and online information can both positively and negatively impact people and the community.

Essential Questions:
How can one tell if a source is credible or not?
What are the signs of misrepresented information?
How can we use media to effectively communicate ideas?
How does social media use impact individuals and communities?
What are the benefits and drawbacks of asynchronous collaboration?

Assessment Evidence

Performance Tasks:	**Other Evidence:**
Social Media profiles to match a career Red Flag Media Claims When to post scenarios Research checklists Future of the career infographic Infographic Career stats spreadsheets and graphs	Asynchronous and synchronous discussions Formative assessments

Benchmarks:
Career Presentation: Summarize findings in PowerPoint or other Presentation tool using media, visualizations, graphs, and data.

Learning Plan

Learning Activities:
Nearpod: Searching strategies
Flocabulary: Fake News
TedEd lessons: Fake News and How to Choose your news
False advertising videos- analyze for hidden messages
Nearpod searching lessons
Group discussion: Analyze sample social media posts for product placement and for hidden messaging
Group collaboration: You do the hiring- pick a profile and defend
Design social media profiles and posts for a chosen profession- creating positive posts
NGPF- LinkedIN Profiles
Career research project:
Research a career that will be available in the future.
Access data- salary over past decade, positions held over the past decade, projected outlook, technology skills, impact of career on environment, skills required
Spreadsheet organization and development
Create a presentation that encompasses findings, visualizations, graphs, and accurate information
Extension game: Digital Compass- Far Fetched Facts; Me, Me Meme
Resources:
Lessons:
Nearpod Lessons: Internet Usage: Effective Search Strategies, Social Media
TedEd Lessons: Fake News, Choose your News
Social Media Templates:
NGPF: Social Media and Careers Mini Unit
Common Sense Media Digital Compass

Other Resources:
Ditch that Textbook templates- PPT
Excel
Microsoft Office Suite
Word
PowerPoint
Teacher curated social media Padlets
Teacher created spreadsheet template

Research websites:
Wakelet curated lists of Career Research sites

School Research Databases
O Net Online
CareerStop
Bridges
Learn360

Unit Modifications for Special Population Students	
Advanced Learners	Advanced Learners will be encouraged to add interactive, video, and other elements into their presentations. In addition, they will be encouraged to expand their research in scope and source.
Struggling Learners	Struggling learners will have access to research planning sheets with chunking, prompts, and examples. Struggling learners will be able to work with template spreadsheets and social media profiles.
English Language Learners	For English Language Learners, options are available, such as providing the students with screencast videos that show how projects are completed, in place of the use of written directions. An emphasis can be placed on the use of videos and illustrations to teach topics. Written directions and articles are provided digitally so they can be translated as needed. Students can represent redesigns graphically instead of using text.
Learners with an IEP	Each special education student has an Individualized Educational Plan (IEP) that details the specific accommodations, modifications, services, and support needed to level the playing field. This will enable that student to access the curriculum to the greatest extent possible in the least restrictive environment. These include: • Variation of time: adapting the time allotted for learning, task completion, or testing • Variation of input: adapting the way instruction is delivered • Variation of output: adapting how a student can respond to instruction • Variation of size: adapting the number of items the student is expected to complete • Modifying the content, process or product Additional resources are outlined to facilitate appropriate behavior and increase student engagement. The most frequently used modifications and accommodations can be viewed here. Teachers are encouraged to use the Understanding by Design Learning Guidelines (UDL). These guidelines offer a set of concrete suggestions that can be applied to any discipline to ensure that all learners can access and participate in learning opportunities. The framework can be viewed here www.udlguidelines.cast.org
Learners with a 504	Refer to page four in the Parent and Educator Resource Guide to Section 504 to assist in the development of appropriate plans.

Interdisciplinary Connections

Indicators:

The course content is related to multiple content areas that are aligned with the NJSLS (New Jersey Student Learning Standards) and the ISTE (International Society for Technology in Education) Standards.

Unit Three, Information and Technology Literacy, relates to the content areas for English Language Arts and Social Studies standards.

The indicators for these standards are specified below:

NJSLS: NJSLSA.R7, NJSLSA.R8, NJSLSA.W7. NJSLSA.W8. 6.3.8.CivicsPI.3:

Integration of 21st Century Skills

Indicators:

For ***Unit Three, Information and Technology Literacy,*** the following practices can be integrated into the classroom in order to prepare students for 21st Century Skills.

Critical Thinking & Problem Solving: Students can exhibit problem-solving skills by analyzing images, social media, and text for bias, hidden messages, and characterization.

Communication: Students can convey their ideas through data visualization and presentations.

Collaboration: Students can contribute to both group and class discussions as well as collaborate on social media and messaging analysis activities.

Creativity & Innovation: Students can derive at creative and unique ideas by creating unique ways to combine, display, and arrange information. Students will also design profiles, graphs, and graphic representations in unique ways.