Interdisciplinary Projects

Content Area: **Technology**Course(s): **Financial Literacy 7**

Time Period: Semester

Length: 1 Semester, 2X per week

Status: **Published**

Essential Questions

- How do I locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media?
- How do I analyze data to identify solutions and/or make informed decisions?
- Why do I need to know how to use a database?
- How do I build, sort and filter data in a database so that it is meaningful for my purposes?
- Why is a spreadsheet such an important technology tool?
- How do I create, format, and edit meaningful information in a spreadsheet?
- How can I use a spreadsheet to benefit my school work or for any personal activities?

Big Ideas

- Detailed examples exist to illustrate crediting others when incorporating their digital artifacts in one's own work.
- There are tradeoffs between allowing information to be public and keeping information private and secure.
- Provide appropriate citation and attribution elements when creating media products.
- Digital footprints are publicly accessible, even if only shared with a select group. Appropriate measures such as proper interactions can protect online reputations.
- Digital communities are used by Individuals to share information, organize, and engage around issues and topics of interest.
- Digital technology and data can be leveraged by communities to address effects of climate change.
- Sometimes a technology developed for one purpose is adapted to serve other purposes.
- Resources need to be utilized wisely to have positive effects on the environment and society.
- Some technological decisions involve tradeoffs between environmental and economic needs, while others have positive effects for both the economy and environment.

Cross-Curricular Integration

English Language Arts

- RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks
- RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and

topics.

- RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
- RST.6-8.10 By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.
- SL.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
- SL.7.5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
- W.7.10. Write routinely over extended time frames (time for research, reflection, metacognition/self correction, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Science

• MS-ESS3-5. Ask questions to clarify evidence of the factors that have caused climate change over the past century.

Career Readiness, Life Literacies and Key Skills Integration

Performance Expectations

- 9.1.8.CR.2: Compare various ways to give back through strengths, passions, goals, and other personal factors.
- 9.1.8.CP.1: Compare prices for the same goods or services.
- 9.1.8.CP.2: Analyze how spending habits affect one's ability to save.
- 9.1.8.FP.1: Describe the impact of personal values on various financial scenarios.
- 9.1.8.FP.2: Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.
- 9.1.8.FP.3: Explain how self-regulation is important to managing money (e.g., delayed gratification, impulse buying, peer pressure, etc.).
- 9.1.8.FP.4: Analyze how familial and cultural values influence savings rates, spending, and other financial decisions.
- 9.1.8.FP.5: Determine how spending, investing, and using credit wisely contributes to financial wellbeing.
- 9.1.8.PB.2: Explain how different circumstances can affect one's personal budget.
- 9.1.8.PB.3: Explain how to create budget that aligns with financial goals.
- 9.1.8.PB.4: Construct a simple personal savings and spending plan based on various sources of income and different stages of life (e.g. teenager, young adult, family).
- 9.1.8.PB.5: Identify factors that affect one's goals, including peers, culture, location, and past experiences.
- 9.1.8.PB.6: Construct a budget to save for short-term, long term, and charitable goals.

- 9.4.8.DC.1: Analyze the resource citations in online materials for proper use.
- 9.4.8.DC.2: Provide appropriate citation and attribution elements when creating media products
- 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
- 9.4.8.DC.7: Collaborate within a digital community to create a digital artifact using strategies such as crowdsourcing or digital surveys
- 9.4.8.DC.8: Explain how communities use data and technology to develop measures to respond to effects of climate change (e.g., smart cities).

Practices

- Act as a responsible and contributing community member and employee.
- Consider the environmental, social and economic impacts of decisions.
- Demonstrate creativity and innovation
- Utilize critical thinking to make sense of problems and persevere in solving them
- Model integrity, ethical leadership and effective management.
- Plan education and career paths aligned to personal goals
- Use technology to enhance productivity, increase collaboration and communicate effectively.
- Work productively in teams while using cultural/global competence.

Enduring Understandings

- 8.2.8.NT.3: Examine a system, consider how each part relates to other parts, and redesign it for another purpose.
- 8.2.8.ETW.1: Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.
- 8.2.8.ETW.3: Analyze the design of a product that negatively impacts the environment or society and develop possible solutions to lessen its impact.

Activities

- Let's Plan a Graduation Party
 - o Scenario: You are finally graduating from middle school and your parents have agreed to host

a graduation party for you and 48 of your closest friends and family (50 ppl total). You are in charge of planning the party and your parents have budgeted on \$3,000 to host the party. You will use the Google Sheets to calculate the expenses of the party and make adjustments until you meet the \$3000 limit.

• Plan an Event

- Students will create a spreadsheet on the items needed to throw a successful party. Information
 will include: Items needed, bought form, amount, cost per item, and total. Students will need to
 insert functions in order to determine totals and the grand total.
- o Students will plan an event, in which they will research similar events, create an event plan, and organize tasks in a spreadsheet. Then, they will use Gmail and Calendar to communicate about their event. Finally, they will market their event by creating a logo, flyer and website.

• Plan and Budget

Students will use Google Sheets to compare products, categorize monthly expenses, research
car loans, conduct a cost-analysis, and create code to track changes to their budget. Then they
will plan and budget for a Spring Break vacation of their choice.

Unit Activities and Assessments

- Money Smart for Grades 6-8: Educator Guide (see pgs. 7-8 for inter-disciplinary ideas)
- Financial Literacy Assembly
- Community Awareness Campaign
- Creating a Financial Literacy Game
- Solving a Community Problem

Additional Resources

- Career Connections | Web Developers: https://ny.pbslearningmedia.org/resource/b5bfbdf4-70ec-4500-ba92-453641025acd/career-connections-web-developer/
- Scientist Profile: Mars Rover Engineer: https://ny.pbslearningmedia.org/resource/5aa004f3-f0a8-40e7-8aea-1aa18aa9705d/ (African-American)
- Intro To Infographics: Behind The Scenes Of Unlocked: https://ny.pbslearningmedia.org/resource/e646d5bb-5990-40a3-8fd5-70a8c82dc0d9/intro-to-infographics-behind-the-scenes-of-unlocked/
- iFarm: https://ny.pbslearningmedia.org/resource/cd2a3f0a-0001-4b78-bd91-d0489e4cc57c/cd2a3f0a-0001-4b78-bd91-d0489e4cc57c/ (Climate Change)
- Striving Toward Financial Well-Being | Financial Lab: <u>https://ny.pbslearningmedia.org/resource/nvfl22-sci-financialwellbeing/striving-toward-financial-well-being-financial-lab/</u>
- Market to Market Classroom: https://ny.pbslearningmedia.org/collection/market_to_market_classroom/
- How New Inventions Help People with Injuries and Disabilities: Lesson Plan | PBS NewsHour: https://ny.pbslearningmedia.org/resource/82de55db-8821-41df-8f32-8327028ec671/lesson-plan-how-new-inventions-help-people-with-injuries-and-disabilities/ (**Disabilities Awareness**)