Course Name	Gifted Education
Grade Level	2nd-5th grade
Lesson Author	Genia Deets, QUEST Teacher, Green Springs Elementary and Havencroft Elementary

Unit Title	My Future
Lesson Title	Code & Create
Suggested Lesson Time	*Two Weeks - 50 minutes each day*
Lesson Objectives	Students will be able to write a detailed report about their experiences while learning to code, utilizing at least three different sources for information.

Instructor Preparation
References
• **STEAM-based Activities | HirePaths - Help Your Kansas Kid Explore Careers**
Instructional Media
• STEAM-based Activities | HirePaths - Help Your Kansas Kid Explore Careers Hirepaths listed many great coding options for students to explore. In my classroom we typically code with Swift Playground, Scratch JR & Scratch, and Dash and Dot.
Equipment and Tools
• Ipads/Computers • Dash and Dot (You could teach this lesson without Dash and Dot, if funds are not available to purchase it.)
Materials
• Paper, Pencils, Crayons

Lesson Components

Code & Create

Objective:

Students will be able to write a detailed report about their experiences on learning to code, utilizing at least three different sources for information.

Assessment:

Students will be assessed through a written report that includes their learnings, challenges faced, and successes achieved while learning to code. The report should cite at least three sources used to gather information.

Key Points:

- Understanding the basics of coding
- Identifying challenges and problem-solving strategies while coding
- Reflecting on the importance of coding in today's world
- Citing credible sources to support findings in the report

Opening:

- Introduce the topic of coding with an engaging question: "How do you think coding influences the technology we use every day?"
- Explain the purpose of the lesson and how students will explore their experiences with coding using different platforms.

Introduction to New Material:

- Discuss the key points through interactive discussions and examples.
- Address the common misconception that coding is only for experts and cannot be learned easily by highlighting the user-friendly features of Swift Playground, Scratch, and Dash and Dot.

Guided Practice:

- Provide coding scenarios for students to work through in pairs.
- Scaffold questioning from simple tasks to more complex challenges.
- Monitor student progress by offering guidance and answering questions.

Independent Practice:

- Task students with writing a detailed report about their coding experiences, challenges faced, and successes achieved.
- Encourage students to use at least three different sources to gather information for their report to enhance credibility.

Closing:

- Have students share one key learning from their coding experiences with the class.
- Summarize the importance of coding skills in problem-solving and innovation.

Extension Activity:

For students who finish early, they can create a simple coding project using Swift Playground, Scratch, or Dash and Dot to showcase their understanding of coding concepts.

Homework:

Students are encouraged to explore coding further by practicing with Swift Playground, Scratch, or Dash and Dot at home for 30 minutes and jotting down any new learnings or challenges faced.

Standards Addressed:

- Common Core Standard: CCSS.ELA-LITERACY.W.5.8 - Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
- ISTE Standard: 3c - Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

Did I….	YES
Brainstorm a list of topics?	
Create my plan of study including specific areas of interest and how and where I will find my information?	
Find at least 3 different types of sources to use?	
Write down detailed and relevant information in an organized way?	
Cite my sources correctly and create a bibliography?	
Create a unique and complete product that shows what I learned in an interesting way?	
Present my product to an authentic audience?	

How well do YOU think you did on your project?