Unit 4: Inquiry Research

Content Area: **English Language Arts**
Course(s):
Time Period: **Trimester 3**
Length: **4-7 sessions**
Status: **Published**

Brief Summary of Unit

Students, with assistance, will locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Students will be doing an Extraordinaires Design Studio project using the Design Thinking Model. Students will learn what design thinking is and will use the Extraordinaires Design Studio to research and design something that will improve or help an Extraordinaires character's life. The Design Thinking Model will be introduced and students will work together to solve a problem such a designing a quiet place to take a phone call at an airport. Students then will be introduced to a character from the Extraordinaires Design Studio, such as the wizard. The library media specialist will model and take the students through the design thinking model to create something that will help the wizard be able to move around easier. Students will pick a character from the Extraordinaires Design Studio and will research the character from the character's card. At the end of the unit, students will design and create a tool that will help the character.

This unit is designed to be part of a developmental progression across grade levels and make interdisciplinary connections across content areas including physical and social sciences, technology, career readiness, cultural awareness, and global citizenship. During this course, students are provided with opportunities to develop skills that pertain to a variety of careers.

Revision Date: July 2023

Standards

This unit challenges students to locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Information literacy includes, but is not limited to, digital, visual, media, textual, and technological literacy. Students will learn about the Design Thinking Model and will use the Extraordinaires Design Studio Kit to research and create something that will help their character. Lessons may include the design thinking model, research process and how information is created and produced; critical thinking and using information resources; research methods; the difference between facts, points of view, and opinions, accessing print and digital library resources.

The identified standards reflect a developmental progression across grades/ levels and make interdisciplinary connections across content areas including social sciences, technology, career readiness, cultural awareness and global citizenship. The standards that follow are relevant to this course in addition to the associated content-based standards listed below.

P.1	Act as a responsible and contributing community members and employee.
9.4.5.CI.1	Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6).
LA.RL.5.1	Quote accurately from a text, and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.
9.4.5.CI.2	Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue (e.g., 6.3.5.CivicsPD.3, W.5.7).
P.4	Demonstrate creativity and innovation.
1.4	Recognize the importance of self-confidence in handling daily tasks and challenges
P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
9.4.5.CI.3	Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity (e.g., 8.2.5.ED.2, 1.5.5.CR1a).
P.6	Model integrity, ethical leadership and effective management.
9.4.5.CI.4	Research the development process of a product and identify the role of failure as a part of the creative process (e.g., W.4.7, 8.2.5.ED.6).
P.8	Use technology to enhance productivity increase collaboration and communicate effectively.
2.2	Recognize the skills needed to establish and achieve personal and educational goals
2.3	Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals
P.9	Work productively in teams while using cultural/global competence.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
3.1	Recognize and identify the thoughts, feelings, and perspectives of others
3.2	Demonstrate and awareness of the differences among individuals, groups, and others' cultural backgrounds
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).
3.3	Demonstrate an understanding of the need for mutual respect when viewpoints differ
LA.RL.5.10	By the end of the year, read and comprehend literature, including stories, dramas, and poems at grade level text-complexity or above, with scaffolding as needed.
4.1	Develop, implement and model effective problem-solving, and critical thinking skills
9.4.5.DC.1	Explain the need for and use of copyrights.
9.4.5.DC.2	Provide attribution according to intellectual property rights guidelines using public domain or creative commons media.
4.3	Evaluate personal, ethical, safety, and civic impact of decisions
9.4.5.DC.3	Distinguish between digital images that can be reused freely and those that have copyright restrictions.
LA.RI.5.1	Quote accurately from a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology (e.g.,

	8.1.5.NI.2).
5.1	Establish and maintain healthy relationships
5.2	Utilize positive communication and social skills to interact effectively with others
LA.RI.5.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
9.4.5.DC.6	Compare and contrast how digital tools have changed social interactions (e.g., 8.1.5.IC.1).
9.4.5.DC.8	Propose ways local and global communities can engage digitally to participate in and promote climate action (e.g., 6.3.5.GeoHE.1).
LA.RI.5.10	By the end of year, read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
9.4.5.IML.1	Evaluate digital sources for accuracy, perspective, credibility and relevance (e.g., Social Studies Practice - Gathering and Evaluating Sources).
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue (e.g., 4.MD.B.4, 8.1.5.DA.3).
LA.RF.5.4	Read with sufficient accuracy and fluency to support comprehension.
LA.RF.5.4.A	Read grade-level text with purpose and understanding.
9.4.5.IML.6	Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).
9.4.5.TL.1	Compare the common uses of at least two different digital tools and identify the advantages and disadvantages of using each.
9.4.5.TL.2	Sort and filter data in a spreadsheet to analyze findings.
9.4.5.TL.4	Compare and contrast artifacts produced individually to those developed collaboratively (e.g., 1.5.5.CR3a).
9.4.5.TL.5	Collaborate digitally to produce an artifact (e.g., 1.2.5CR1d).
LA.SL.5.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
LA.SL.5.1.A	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
LA.SL.5.1.C	Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
LA.SL.5.1.D	Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
LA.SL.5.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
LA.SL.5.5	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
LA.SL.5.6	Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.
LA.L.5.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
I.A.1	Formulating questions about a personal interest or a curricular topic.
I.A.2	Recalling prior and background knowledge as context for new meaning.
I.B.1	Using evidence to investigate questions.

I.B.3	Generating products that illustrate learning
I.C.1	Interacting with content presented by others.
I.C.2	Providing constructive feedback.
I.C.3	Acting on feedback to improve.
I.C.4	Sharing products with an authentic audience
I.D.1	Continually seeking knowledge.
I.D.2	Engaging in sustained inquiry.
I.D.3	Enacting new understanding through real-world connections.
I.D.4	Using reflection to guide informed decisions.
V.A.1	Reading widely and deeply in multiple formats and write and create for a variety of purposes
V.A.3	Engaging in inquiry-based processes for personal growth.
V.B.1	Problem solving through cycles of design, implementation, and reflection.
V.B.2	Persisting through self-directed pursuits by tinkering and making.
V.C.1	Expressing curiosity about a topic of personal interest or curricular relevance
V.C.2	Co-constructing innovative means of investigation.
V.C.3	Collaboratively identifying innovative solutions to a challenge or problem
V.D.1	Iteratively responding to challenges.
V.D.3	Open-mindedly accepting feedback for positive and constructive growth.
II.B.2	Evaluating a variety of perspectives during learning activities.
II.C.2	Contributing to discussions in which multiple viewpoints on a topic are expressed.
II.D.1	Seeking interactions with a range of learners.
IV.A.1	Determining the need to gather information.
IV.A.2	Identifying possible sources of information.
IV.A.3	Making critical choices about information sources to use.
IV.B.1	Seeking a variety of sources.
IV.B.2	Collecting information representing diverse perspectives.
IV.B.3	Systematically questioning and assessing the validity and accuracy of information.
IV.B.4	Organizing information by priority, topic, or other systematic scheme.
IV.C.1	Accessing and evaluating collaboratively constructed information sites.
IV.D.1	Performing ongoing analysis of and reflection on the quality, usefulness, and accuracy of curated resources.
IV.D.2	Integrating and depicting in a conceptual knowledge network their understanding gained from resources.
IV.D.3	Openly communicating curation processes for others to use, interpret, and validate.
VI.A.1	Responsibly applying information, technology, and media to learning.
VI.A.2	Understanding the ethical use of information, technology, and media.
VI.A.3	Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.
VI.B.1	Ethically using and reproducing others work.
VI.B.2	Acknowledging authorship and demonstrating respect for the intellectual property of

	others.
VI.C.2	Disseminating new knowledge through means appropriate for the intended audience.
VI.D.1	Personalizing their use of information and information technologies.
VI.D.2	Reflecting on the process of ethical generation of knowledge.
VI.D.3	Inspiring others to engage in safe, responsible, ethical, and legal information behaviors.
III.A.1	Demonstrating their desire to broaden and deepen understandings.
III.A.2	Developing new understandings through engagement in a learning group.
III.A.3	Deciding to solve problems informed by group interaction.
III.B.1	Using a variety of communication tools and resources.
III.B.2	Establishing connections with other learners to build on their own prior knowledge and create new knowledge
III.C.1	Soliciting and responding to feedback from others.
III.D.1	Actively contributing to group discussions.
III.D.2	Recognizing learning as a social responsibility.
TECH.8.1.2.D.CS1	Advocate and practice safe, legal, and responsible use of information and technology.

Essential Questions

- How can a variety of skills and strategies facilitate inquiry research?
- How can I access information in a safe, legal and proper manner?
- How can I identify the information I need to complete a specific task?
- How can students use technology to communicate information and ideas using a variety of digital media and formats?
- How does the appropriate choice of media allow for more effective communication?
- How does the Design Thinking Model help with inquiry research?
- What is the Design Thinking Model
- What skills and strategies are needed to gather information effectively, solve problems, and conduct inquiry research?
- Where can students find relevant and authoritative information?
- Why are exploration and creation an important part of learning?
- Why do we give credit to the author or creator of any created work?
- Why must credit be given to the creator of work used during research?
- Why should you use questions to guide inquiry research?

Students Will Know/Students Will Be Skilled At

- that selecting the right resource is key to locating the right information
- that information from different resources must be synthesized to answer a question or solve information problems
- that asking the right questions is an important tool for research
- that information needs to be accessed and used in a safe, legal and proper manner

- How to access information properly

- A researcher must give credit to the author or creator of any created work.
- how to access information properly.
- Identify and author and illustrator as a creator of a work.
- Identifying the appropriate resources to help them answer their questions.
- Identifying the information needed and what resources will address those needs.
- Illustrating and communicating original ideas and stories using digital tools and resources.
- Information can be shared in a variety of formats.
- Presenting their information in a format appropriate to the topic and/or audience. exploration.
- Reading or viewing the appropriate resources critically and finding the information they need to answer their questions
- requires a variety of skills and strategies facilitate inquiry research
- research is a way to locate information for a specific purpose
- Showing they can perform basic navigation around appropriate websites or databases.
- Synthesizing the information gathered from different sources and answering the questions they asked.
- that asking the right questions is an important tool for research.
- that following the steps in the Design Thinking Model will help them create and refine their finished product.
- that information needs to be accessed and used in a safe, legal and proper manner.
- the steps in the Design Theory Model
- Understand that the library media center has online resources to help with inquiry research.
- using age-appropriate research resources that are available through the library media center.
- Using books/pre-selected online resources/observations to gather information for a purpose.
- Utilizing the OPAC and Library Media Center's Symbaloo to locate relevant materials.

Evidence/Performance Tasks

Students demonstrate differentiated proficiency through both formative and summative assessments in the classroom. Based on individual student readiness and performance, assessments can be implemented as formative and/or summative.

Developmental progression across years in media is evidenced through benchmark assessments as part of the media specialist's Student Growth Objective (SGO). Student proficiency allows for additional or alternative assessment based on demonstration or absence of skill.

The performance tasks listed below are examples of the types of assessments teachers may use in the classroom and the data collected by the district to track student progress.

In addition to the “possible assessments” provided in the Learning Plan section, teachers may consider the performance tasks listed below:

- Formative: Construct questions to help solve their information problem
- Formative: Define an information problem.
- Formative: Locate and select appropriate print and digital resources.
- Formative: Locate information within selected resources.
- Formative: Make a list of resources used.
- Formative: Share their information in an appropriate format
- Formative: Use appropriate note-taking skills.
- Formative: Use the Design Thinking Model steps to create their finished product.
- Formative: Use the information they find to answer their questions.
- Summative: Design, Plan, and Create.

Learning Plan

Media Specialists may personalize instruction during this unit and address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students.

Media Specialists at the elementary level design their own unique lesson plans in order to incorporate the essential questions provided in this unit. The order in which this information is presented is dependent upon the variables specific to each elementary school community. For example, students may use different books and electronic sources depending on the library media center's collection.

Fifth grade students, with assistance, will locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Students will be doing an Extraordinaires Design Studio project using the Design Thinking Model. Students will learn what design thinking is and will use the Extraordinaires Design Studio to research and design something that will improve or help an Extraordinaires character's life. The Design Thinking Model will be introduced. Students then will be introduced to a character from the Extraordinaires Design Studio, such as the wizard. The library media specialist will model and take the students through the design thinking model to create something that will help the wizard be able to move around easier. Students will pick a character from the Extraordinaires Design Studio Kit and will research the character from the character's card. At the end of the unit, students will design and create something that will help the character.

Suggested activities are listed below for this unit:

Week 1:

Introduce and review with students to the Design Thinking Model. Go through the five steps. Give an example of a problem that someone would use the design thinking model to solve, such as someone needing a quiet place to take an important phone call at an airport. Walk the students through the 5 steps to design a quiet space at an airport. 1. Define what is needed in the space. 2. Ideate (Imagine) what the place would include and look like. 3. Design/Draw a Prototype. 4. Test the

Prototype (what worked and what didn't work). 5. Create the finished area.

Week 2:

Review last week. Give an example of something that would help me in my life. Show Youtube video of 10 Inventions to simplify your life. Introduce the Extraordinaires Design Studio Kit. Show the picture card of the wizard. Explain to students that they need to look at both sides of the card. The card will give you information about the character. Have students to brainstorm what they know about the wizard from the card. Have the students to work in small groups to fill out the handout "Getting to Know Your Extraordinaire. " Pull a design card from the kit-Design something where the wizard to sit that would help him. Students can brainstorm what the wizard would need for him to sit on and would help him. Show the "Sorcerer's Scooter." Have students go to the Library Media Google Classroom and look at the character cards that are available and pick one that they would like to use for their project.

Week 3:

Show the students the books, Not a Stick and Not a Box. Talk about how the main character takes a stick and uses it for something else. Have students to go to the Library Media Google Classroom. Have students pick their character from the Extraordinaires Kit today. Students then need to study the character to get to know their Extraordinaires character. Have them to brainstorm what they might want to design for their character.

Week 4:

Have students to continue working. Students need to begin designing their object for their character.

Week 5:

Students need to finish their design and put together their ideas to present to the class next week.

Week 6 and 7:

Students will present their Extraordinaires Character, the object that they designed for the character, and how it will help the character to the class.

- Media specialist will assist students as they select a format to share their product and information about their Extraordinaires' character.
- Media specialist will assist students in locating the resources they need.
- Media specialist will model the Design Thinking Model.
- Media specialist will model using the Design Thinking Model by picking a character from Extraordinaires Kit (wizard) to the finished product for the character (somewhere to sit-Soccerer's Scooter").
- Media Specialist will question the students where necessary to guide them through their research to design their end product for their Extraordinaires character.
- Media specialist will work with students to help guide them through the design thinking model.

Materials

The materials used in this course integrate a variety of leveled instructional, enrichment, and intervention materials that support student learners at all levels in the school and home environments. Associated web content and media sources are infused into the unit as applicable and available.

Suggested Supplemental Materials:

Extraordinaires Design Studio Kit -with cards

Virtual Extraordinaires Design Studio Kit

Week 1-Extraordinaires Google Slides

Week 2-Extraordinaires Google Slides

Week 3-Extraordinaires Google Slides

Link to Extraordinaires Folder in Shared Drive with Needed Files

Graphic Organizer-Evaluating

Graphic Organizer-Brainstormin

Graphic Organizer-For Getting to Know You (about the character)

Idea Pad Paper for students to design on

Strategies for Accommodations and Modifications

Content specific accommodations and modifications as well as Career Ready Practices are listed here for all students, including: Special Education, English Language Learners, At Risk of School Failure, Gifted and Talented, Students with 504.