Unit 05: Inquiry Research

Content Area: **English Language Arts**
Course(s):
Time Period: **Trimester 2**
Length: **8-10 sessions**
Status: **Published**

Brief Summary of Unit

Students, with assistance, locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Students will read a fairy tale in it's original version, than read additional fractured fairy tales versions, in addition they will learn about and demonstrate their understanding of the inquiry research method, and end the unit with a STEM activity where they will build/construct a structure using the knowledge they've gained in their research.

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: June 2021

Standards

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.

LA.RL.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
LA.RL.2.10	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
LA.RI.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
LA.RI.2.4	Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
LA.RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
LA.W.2.7	Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
LA.W.2.8	Recall information from experiences or gather information from provided sources to answer a question.
I	Inquire: Build new knowledge by inquiring, thinking critically, identifying problems, and

	developing strategies for solving problems.
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	Learners engage with new knowledge by following a process that includes:
I.B.1	Using evidence to investigate questions.
I.B.3	Generating products that illustrate learning
I.C	Learners adapt, communicate, and exchange learning products with others in a cycle that includes:
I.C.1	Interacting with content presented by others.
I.C.4	Sharing products with an authentic audience
I.D	Learners participate in an ongoing inquiry-based process by:
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	Explore: Discover and innovate in a growth mindset developed through experience and reflection.
V.A.3	Engaging in inquiry-based processes for personal growth.
V.B	Learners construct new knowledge by:
V.B.1	Problem solving through cycles of design, implementation, and reflection.
V.B.2	Persisting through self-directed pursuits by tinkering and making.
IV.B	Learners gather information appropriate to the task by:
IV.B.1	Seeking a variety of sources.
IV.B.2	Collecting information representing diverse perspectives.
CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
III	Collaborate: Work effectively with others to broaden perspectives and work toward common goals.
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	Learners participate in personal, social, and intellectual networks by:
III.B.2	Establishing connections with other learners to build on their own prior knowledge and create new knowledge
III.D	Learners actively participate with others in learning situations by:

III.D.1	Actively contributing to group discussions.
III.D.2	Recognizing learning as a social responsibility.
TECH.8.1.2	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.2.A.3	Compare the common uses of at least two different digital applications and identify the advantages and disadvantages of using each.
TECH.8.1.2.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.2.D.1	Develop an understanding of ownership of print and nonprint information.
TECH.8.1.2.D.CS1	Advocate and practice safe, legal, and responsible use of information and technology.
TECH.8.2.2.D	Abilities for a Technological World: The designed world is the product of a design process that provides the means to convert resources into products and systems.
TECH.8.2.2.D.3	Identify the strengths and weaknesses in a product or system.
TECH.8.2.2.D.CS1	Apply the design process.
TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
TECH.9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Essential Questions

- How can a variety of skills and strategies facilitate inquiry research?
- How can the student use technology to communicate information and ideas using a variety of digital media and formats?
- How does the appropriate choice and creative use of media allow us to communicate effectively?
- How does the appropriate choice of media allow for more effective communication?
- What similarities and differences do retold and fractured fairy tales share?
- 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 do we give credit to the author or creator of any created work?
- Why is research composed of a process for various purposes?
- 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

- A researcher must give credit to the author or creator of any created work.
- Identify an author and illustrator as a creator of a work.
- Identifying the information needed and what resources will address those needs.

- Illustrating and communicating original ideas and stories using digital tools and resources.
- Organizing and summarizing their information.
- Research is a way to locate information for a specific purpose.
- Showing they can perform basic navigation around appropriate websites.
- To apply existing knowledge to generate new ideas or products.
- Understand that the library media center has online resources to help with inquiry research.
- Using books/pre-selected online resources/observations to gather information for a purpose.
- Utilizing the OPAC to locate relevant materials.
- What similarities and differences the fairy tales read share.
- What type of age appropriate research resources are available through the library media center.

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). Follow up diagnostic assessments are used to target skill remediation. 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.

- Formative: Completed graphic organizers.
- Formative: Gathers information to satisfy an informational need.
- Formative: Locate and selects appropriate print and digital resources.
- Formative: Makes a list of resources used.
- Formative: Uses appropriate note-taking skills.
- Formative: Uses drawing/writing/technology to record information.
- Summative: Design Plan & Build

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 be called to the carpet for a lesson followed by guided practice, then independent practice. After the lesson, students will check out books. Library Media time ends with an electronic story or students going to a makerspace station.

Second grade students, with assistance, locate, access, evaluate, and use information effectively and efficiently to conduct research and solve problems using digital and visual media. Students will read a fairy tale in it's original version, than read additional fractured fairy tales versions, in addition they will learn about and demonstrate their understanding of the inquiry research method, and end the unit with a STEM activity where they will build/construct a structure using the knowledge they've gained in their research. Suggested activites are listed below for this unit:

Suggested Learning Plan:

Week One: Introduction

Read from Book: A Book of Bridges & Read traditional tale of The Three Billy Goats Gruff Identify ARCH style of bridge in book. Define term “research” and explore PebbleGo with group to research “Goats”.

Materials: Google Slides: Inquiry:The Three Billy Goats, PebbleGo Database, Chromebooks

Books: A Book of Bridges (Cheryl Keely) and The Three Billy Goats Gruff (George Bridge)

Week Two: Recall and Fractured Fairy Tales

Recall last lesson on Arch Bridge style Read fractured fairy tale the read: The Three Billy Goats Fluff. After book selection watch:The Three Silly Billies by Margie Palatini.

Book: The Three Billy Goats Fluff (Rachael Mortimer)

(Cranford Library Website)Tumblebooks:The Three Silly Billies by Margie Palatini

Week Three: Other Fractured Fairy Tales

Read fractured fairy tale version:The Three Cabritos. Identify BEAM style of bridge used in book, and after book selection challenge students to build a bridge. Have assorted materials out for students to create bridges that a car can go over.

Book: The Three Cabritos (Eric Kimmel)

Week Four

Using nonfiction eBook: A Bridge Goes Over on smartbaord, read to find out how engineers design and build bridges. Introduce poster of the Engineering Design Process Watch video of building a bridge, then after book selection students interact with activities from ebook-access through symbaloo Home Page.

Book:A Bridge Goes Over (Kylie Burns) Chromebooks

Week Five

Using google slides-Discuss different types of bridge designs (suspension, arch, beam, covered, drawbridge, rope) and introduce key vocabulary (abutment, piers, span, roadway) Watch video What Makes A Bridge So Strong?

Challenge students to build bridge that will support a cup of marbles

Week Six

Read from book: Iggy Peck, Architect. Review vocabulary taught in previous lesson. Watch video of how a bridge is built. Students plan their bridge design.

Book: Iggy Peck, Architect (Andrea Beaty)

Worksheet for Bridge Plan

Week Seven

Using materials provided, build a bridge that the troll can fit under and supports the weight of three goats.

Week Eight

Assessment- Discuss what was learned in unit. View photos of bridge designs.

- Communicate with teachers and parents how to access online resources.
- Compare and contrast the elements of the retold and fractured fairy tales read in class comparing events, characters, plot, etc.
- Demonstrate how to access age appropriate pre-selected online resources.
- Explain copyright and plagiarism in an age appropriate way.
- Guide students to locate appropriate books in the nonfiction section of the library media center with the assistance of the OPAC.
- Mini lessons may include: Demonstrate how to utilize OPAC for locating materials, using graphic organizers to model age appropriate note taking, and how to cite their research sources.

- Model how to select an appropriate resource to satisfy a specific informational need.
- Model various ways to record information.
- Ongoing collaboration with teachers regarding units taught within the classroom.
- Preview the essential questions and connect to learning throughout the unit.
- Refer to visual aids displayed in library media center.
- Within a collaborative group, use a variety of technologies to produce a research project.
- Within the library media center have materials available for inquiry activities.

Materials

The materials used in this course allow for integration of a variety of 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:

Design Plan & Build Challenge & Predictions (Google Doc)

Inquiry: Three Billy Goats Gruff (Google Slides)

Inquiry: The Troll Under the Bridge (Google Slides)

How a Bridge Is Built/Types of Bridges (Google Slides)

Week One (Google Slides)

Week Two (Google Slides)

Week Three (Google Slides)

Week Four (Google Slides)

Week Five (Google Slides)

Book: A Book of Bridges (Cheryl Keely)

Book: The Three Billy Goats Gruff (George Bridge)

Book: The Three Billy Goats Fluff (Rachael Mortimer)

Book: The Three Silly Billies (Margie Palatini)

Book: The Three Cabritos (Eric Kimmel)

Book: A Bridge Goes Over (Kylie Burns)

Book: Iggy Peck, Architect (Andrea Beaty)

Video: What Makes A Bridge So Strong? (YouTube)

- Age appropriate online databases
- Age appropriate websites
- Computer technology (Ipads/Chromebooks/Tablets)
- Interactive board technology
- Presentation software
- Quality library media center collection of print and nonprint relevant resources
- Visual aids

Suggested Strategies for Accommodations and Modifications

Content specific accomodations 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.