Nov. Gr. 5The Impact of Exploration-Grade 5 SS

Content Area: **Gifted and Talented**
Course(s):
Time Period: **November**
Length: **6-8 Weeks**
Status: **Published**

Unit Overview

The Impact of Exploration unit provides fifth grade gifted students an opportunity to examine the concept of exploration. Van Tassel-Baska and Stambaugh, in their book Comprehensive Curriculum for Gifted Learners, talk of the epistemological concept dimension of curriculum. "It reflects a concern for exposing students to key ideas, themes, and principles within and across domains of knowledge¼" (p. 11). This unit encourages students to delve deep into the concept of exploration and create generalizations. Additionally, it provides teachers the opportunity for differentiation. Gifted students learn at faster rates, grasp ideas more easily and often have a dislike for repetition. Optional activities are provided in this unit to allow for varied learning and interest styles. In addition, the process is varied throughout the lessons, so students are not simply listening to lectures or writing a response on paper. The final project allows students to research an issue or problem of choice. The process to complete the research is guided and structured, but the topic is chosen by the student. This allows students to pull from their interests and schema. They become vested in their project because it has a connection for them and they chose it themselves. In addition, they can work at their pace on the project.

A typical fifth grade social studies class will study the age of exploration and only focus on historical, traditional explorers. In other words, white, European men looking to discover new land. This unit elevates the content in both breadth and depth. Students will look at exploration through different lenses and examine both the positive and negative impact across people, places and history. Students are encouraged to delve beyond the widely assumed stereotypes of what an explorer is and research an issue or problem with grit. Using a structured research model, with guidance, students learn to become "independent in their search for knowledge" (Van Tassel- Baska & Stambaugh, p. 270). They have the capacity to become an explorer themselves.

A number of key strategies have been employed throughout the unit to appeal to the varied

learning styles and preferences of gifted students. In the first lesson, students will utilize the Taba Concept Development Model to generate a list of key explorer characteristics and generalizations. In the third lesson, students will deviate from a typical social studies lesson and instead complete a WebQuest in small groups to learn more about non-traditional and modern day explorers. In lesson four, students will be guided by the William and Mary Persuasive Writing Model as they complete a persuasive writing piece concerning space exploration funding. Finally, the last lesson has students completing an independent research assignment using the William and Mary Research Model. All of the models and strategies inserted through the unit serve to stimulate critical thinking and allow for creativity. The goal is for students to repeatedly use the same strategy or model, so they internalize the process and use it throughout all of their studies.

During the first lesson of the unit, students will complete a pre-assessment asking them to state the impact exploration has had on our world. The writing piece will be collected and used for comparison when the same topic is addressed upon the unit's completion. The two writing samples will be graded by the instructor to demonstrate individual student growth from the unit's beginning to end.

CURRICULUM CONCEPT MAP BELONGS HERE

Enduring Understandings

• Exploration impacts our world both positively and negatively by pushing beyond known boundaries.

• Exploration confronts the unknown/uncharted.

• Exploration requires recognizing purpose and responding to it.

• Exploration may result in new findings or the confirmation of old findings.

Essential Questions

How has exploration impacted the world both positively and negatively by pushing beyond know boundaries?

What motivates an explorer?

How are new findings discovered in exploration assimilated into existing knowledge?

Instructional Strategies & Learning Activities

DESCRIPTION OF LESSONS

• Lesson 1- Traditional Explorers

Students will complete a pre-assessment for the unit. Students will use Taba's Concept

Development Model to create generalizations about explorers. Students explore traditional explorers and list common characteristics they share.

• Lesson 2- Non-Traditional Explorers

Students will learn about various non-traditional explorers to recognize explorers exclusive of

travelers or discoverers of new land. They will use the think-pair-share strategy to compare their common characteristics to those of traditional explorers.

• Lesson 3- Non-Traditional Explorers WebQuest

Students will participate in a teacher-created WebQuest showcasing the work of modern-day, non-traditional explorers. Students will record the explorers accomplishments in a yearbook format.

• Lesson 4- Funding Space Exploration

Students will use a search engine to find articles in support of and disapproving of government

funding for space exploration. Students will analyze their articles using Paul and Elder's

Template for Analyzing the Logic of an Article. Using The William and Mary Persuasive Writing Models, students will then write a persuasive essay sharing their opinion on the topic.

• Lesson 5- Become an Explorer Research Project

Students will become explorers, investigating an issue or problem of their choice using The

William and Mary Research Model. They will create a project to share their findings, preferably with a real-

world audience. Students will complete a post- assessment for the unit.

TRADITIONAL EXPLORERS- LESSON 1

LESSON OVERVIEW

In this lesson, students will complete a pre-assessment for the unit using Taba's Concept

Development Model to create generalizations about explorers. Then, students will explore traditional explorers and list common characteristics they share.

OBJECTIVES

In this lesson students will:

• Complete a pre-assessment for the unit • Sort and classify examples of explorers • Create generalizations about explorers

• Explore various traditional explorers and list common characteristics

ESSENTIAL QUESTIONS

• How does exploration impact our world?

• What common characteristics exist amongst explorers?

• What do explorers discover/seek?

KEY CONCEPTS

• Exploration

• Impaction • Innovation

• Cause/effect

FOCUS ACTIVITY

Students will enter the classroom with a notecard on their desk. On their notecard will be the name of a traditional explorer (see sample list in Resources below) or an accomplishment of a

traditional explorer. Students will have to find the match to their notecard from another

classmate. Notecards will be color-coded for easy identification. Students should find their

partner, read their notecards and then sit down for the lesson. Sharing will take place later on during the lesson.

CENTRAL LEARNING ACTIVITIES

1. Students will complete a pre-assessment for the unit by answering the following question:

How does exploration impact our world? This question will also be used for the post- assessment and teachers

will compare the students' responses to the question.

2. Students will use Taba's Concept Development Model to generate a list of words associated

with "explorers." Those words will be sorted and classified and then generalizations will be written. This will also serve as a pre-assessment and will be repeated as a post-assessment at

the units completion. (See resource list for further information about using Taba's Model.)

3. Students will now share the information on the notecards they received when they first entered

class. This will give students a brief overview of various traditional explorers and their accomplishments.

4. Students will explore various websites, books, and primary source documents and complete a

"who's who" booklet of information about several traditional explorers. They can use

explorers from the focus activity notecards or others they find in their readings. Students **should include name, accomplishment, hardships faced, other interesting facts.**

5. Students will infer from their readings the common characteristics that exist among explorers.

A class list should be created and posted.

SUMMARY/ASSESSMENT/REFLECTION ACTIVITY

For homework, students will generate a list of what traditional explorers discover/seek. Teachers should allow for a class discussion the following class period in order to create a combined class list. Teachers should allow students to include places in their list, but encourage the students to think of broader ideas, such as *adventure, culture, uncharted, challenge, something new...*

Optional activities

• Teachers can post the homework assignment**on www.answergarden.com. This website** allows

students to create a master list with all their responses.

• Students can create a word cloud (using www.wordle.com**or www.tagxedo.com)** to show

either list. Word clouds will make words appear larger and more bold every time they are repeated, so those key words will stand out.

• If the students will not be studying the age of exploration in their fifth grade social studies

class, teachers may want to spend more time examining traditional explorers within this unit.

RESOURCES

• Taba's Concept Development Model

http://dodea.edu/curriculum/giftedEduc/upload/models_differentiation.pdf

http://www.rfwp.com/samples/conceptdevelopmentp1-15.pdf

• Sample list of traditional explorers

http://www.crabtreebooks.com/download/tg/978-0-7787-2401-8_in_the_footsteps.pdf

NON-TRADITIONAL EXPLORERS- LESSON 2

LESSON OVERVIEW

In this lesson, students will learn about various non-traditional explorers to recognize explorers

exclusive of travelers or discoverers of new land. They will use the think-pair-share strategy to compare their common characteristics to those of traditional explorers.

OBJECTIVES:

In this lesson students will:

• explore various non-traditional explorers.

• recognize explorers exclusive of travelers or discoverers of new land. • develop an understanding of how explorers have impacted our world.

ESSENTIAL QUESTIONS:

• What do explorers discover/seek?

• What common characteristics exist amongst explorers?

• How has the definition of an explorer changed over time?

KEY CONCEPTS:

• Exploration • Innovation

• Cause/effect

• Change

FOCUS ACTIVITY

Students will enter the classroom with a piece of white construction paper on their desks. They

will be asked, with a prompt on the chalkboard, to draw what they think a traditional explorer looked like from the readings they did in the previous lesson.

CENTRAL LEARNING ACTIVITIES:

1. Remind students of their previous lessons and re-examine the list of characteristics explorers

have in common, as well as what they discover/seek.

2. Students should share the images they drew of a traditional explorer. Did they all visualize a white, European male? A discussion should ensue about why that is. Do they recognize the stereotypes, sexism, racial prejudice throughout history? Explain that this unit will allow them to move beyond that definition and create their own modern definition of an explorer.

3. Students will watch the first few minutes of a TED-Ed video about female explorers (see Resource section below). They will view a "teaser" about Marianne North, an 1800's naturalist and botanical artist who traveled the word to discover new plants and paint them.

4. Students will rotate through stations where they will watch the remaining portion of the TED.ed video on female explorers, watch other TED.ed presentations, examine various websites and read articles about non-traditional explorers (technologists, doctors, researchers, scientists, anthropologists, film makers, astronauts, linguists¼).

5. Students will respond to the following prompts through "think-pair-share." They should individually think about the questions asked, pair with a partner, and share with their partner.

Is an explorer only someone who travels and discovers new land? How are the men/women you just learned about explorers? What characteristics do they share with the traditional explorers we first learned about?

SUMMARY/ASSESSMENT/REFLECTION ACTIVITY

Students should share their "think-pair-share" responses with the class. Refer to the class list of characteristics created in lesson one. Students should add to the list if they generate more characteristics. For homework, students should be encouraged to re-visit some of the websites they looked at in class.

On an exit ticket (post-it note), ask students what they would want to explore if given the chance.

Optional activities for classwork or homework:

• Write a fictitious diary/journal entry from the perspective of one of the non-traditional

explorers. Be sure to include examples of their characteristics.

•**Visit the ITACE** blog (see Resources section below) and ask the students to comment on one of

the blog posts. Students should make a copy of the blog post they read and their response to it and share it with their teacher/class.

• Use the characteristics list to create character education posters. Many schools have character

education programs where they emphasize a monthly word. Students could create a poster

(either by-hand or on the computer) showcasing an explorer who is characterized by one of the monthly character education words. Examples are: determination, perseverance, respect...

RESOURCES:

• TED-Ed | The contributions of female explorers

http://ed.ted.com/lessons/the-contributions-of-female-explorers-courtney-stephens

•**TED-Ed | Deep ocean** mysteries and wonders

http://ed.ted.com/lessons/deep-ocean-mysteries-and-wonders

•**Video clip about the 100th anniversary of the famous** Antarctic expedition by Sir Ernest

Shackleton to be recreated in 2014 with**modern equipment.**

http://www.pbs.org/newshour/thenews/thegov/story.php?id=19662&package_id=634

•**ITACE (Imperial Trans-Antarctic Centenary Expedition) team and blog**

http://www.south2014.com/the-team http://www.south2014.com/the-team/blog

• 10 Modern Explorers Who Pushed The Limits

http://listverse.com/2013/02/26/10-modern-explorers-who-pushed-the-limits/

•**Modern Explorers**

http://www.biography.com/blog/modern-explorers-20995993

•**National Geographic Explorers**

http://www.nationalgeographic.com/explorers/

• Library of Congress Discovery and Exploration

http://memory.loc.gov/ammem/gmdhtml/dsxphome.html

• XPRIZE- exploration competition

http://www.xprize.org/prize-development/exploration

• Iditarod mushers www.iditarod.com

• Biographies (Steve Jobs, Mark Zuckerberg, Nelson Mandela¼)

www.biography.com

NON-TRADITIONAL EXPLORERS WEBQUEST- LESSON 3

LESSON OVERVIEW

In this lesson, students will work in small groups to complete a WebQuest showcasing the work of modern-day, non-traditional explorers.

OBJECTIVES:

In this lesson students will:

• Use technology to complete a modern-day exploration WebQuest and accompanying activity (Yearbook of Explorers).

• Explore various non-traditional explorers and learn about their accomplishments.

• Compare/contrast characteristics of traditional and non-traditional explorers.

ESSENTIAL QUESTIONS:

• How does modern day exploration impact our world?

• What do non-traditional explorers discover/seek?

• How do modern day and traditional explorers differ?

KEY CONCEPTS:

• Impaction

• Exploration • Innovation

FOCUS ACTIVITY

Students will enter the classroom with a notecard on their desk. On their notecard will be the name and picture of a non-traditional explorer. In the middle of the classroom will be two hula hoops. One will have a "yes" sign taped to it while the other has a "no" sign attached to it. If the student knows of the explorer and their accomplishments, they will put their notecard in the yes hoop. If the student does not know the explorer, their notecard will go in the no hoop. The purpose of this "hook" is to demonstrate the wide range of explorers, not just the traditional ones usually studied in social studies. This activity and resulting discussion will lead nicely into the central learning activities focusing on modern day explorers (as opposed to the traditional explorers discussed in previous lessons).

CENTRAL LEARNING ACTIVITIES:

1. Following the focus activity, the teacher will introduce the WebQuest and the task students will be working to accomplish. The teacher will also demonstrate the various websites and resources to be utilized to make sure students are sufficiently adept at navigating the websites being used.

2. Students will work is small groups to complete the WebQuest and visit all of the listed websites.

3. Students will compile their information and notes taken to create a Yearbook of Explorers.

Each page of the yearbook will feature a printed photograph or drawing of the explorer and a list of biographical information and accomplishments.

4. Students will examine the generalizations they created in the first lesson and determine if they can add more after further examination of non-traditional explorers. Some possible generalizations:

• Exploration confronts the unknown/uncharted.

• Exploration may result in new findings or the confirmation of old findings.

• Exploration may perpetuate order or chaos.

• The accomplishments of explorers may influence history.

Integration of Career Readiness, Life Literacies and Key Skills

9.4.5.CI	Creativity and Innovation
9.2.5.CAP	Career Awareness and Planning
	Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or innovative solutions.
	An individual's passions, aptitude and skills can affect his/her employment and earning potential.
9.2.5.CAP.1	Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
9.2.5.CAP.2	Identify how you might like to earn an income.
	Curiosity and a willingness to try new ideas (intellectual risk-taking) contributes to the development of creativity and innovation skills.
9.2.5.CAP.3	Identify qualifications needed to pursue traditional and non-traditional careers and occupations.
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).
	The ability to solve problems effectively begins with gathering data, seeking resources, and applying critical thinking skills.
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).
9.4.5.DC	Digital Citizenship
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.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology (e.g., 8.1.5.NI.2).
9.4.5.GCA.1	Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).
9.4.5.IML	Information and Media Literacy
	Digital tools and media resources provide access to vast stores of information, but the information can be biased or inaccurate.

Technology and Design Integration

CS	Computing Systems
	Computing devices may be connected to other devices to form a system as a way to extend their capabilities.
	Software and hardware work together as a system to accomplish tasks (e.g., sending, receiving, processing, and storing units of information).
8.1.5.CS.2	Model how computer software and hardware work together as a system to accomplish tasks.
	Shared features allow for common troubleshooting strategies that can be effective for many systems.
8.1.5.CS.3	Identify potential solutions for simple hardware and software problems using common troubleshooting strategies.

Interdisciplinary Connections

CCSS.ELA-Literacy.RL.5.1	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
CCSS.ELA-Literacy.W.5.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
LA.5.CCSS.ELA-Literacy.CCRA.R.1	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
LA.5.CCSS.ELA-Literacy.CCRA.R.4	Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
LA.5.CCSS.ELA-Literacy.CCRA.R.10	Read and comprehend complex literary and informational texts independently and proficiently.
LA.5.CCSS.ELA-Literacy.CCRA.W.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
TECH.8.1.5	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.8.1.5.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.5.F	Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.

- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.
- **Definitions of Differentiation Components**:
    - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
    - Process – how the student will acquire the content information.
    - Product – how the student will demonstrate understanding of the content.
    - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

All students in the Gifted and Talented classroom have choices and are encouraged to take thier work up to their personal challenge level.

Modifications & Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.
Modifications and Accommodations used in this unit:

Individual student IEP's are followed as required.

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.
Schoolwide Benchmark assessments:
Aimsweb benchmarks 3X a year
Linkit Benchmarks 3X a year
Additional Benchmarks used in this unit:

Teacher observation and data collection of growth over time and grade levels.

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).
Formative Assessments used in this unit:

Formative Assessments are located in the Instructional Strategies and Learning Activities Lesson plans listed above.

Summative Assessments

Summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.
Summative assessments for this unit:

SUMMARY/ASSESSMENT/REFLECTION ACTIVITY

The WebQuest should take several class periods to complete. Upon completion, students will be asked to compare and contrast the information learned about modern day explorers with what they learned about traditional explorers. Questions posed could address common/differing personal characteristics, public responses to the accomplishments made, and the level of notoriety given to the explorer following the accomplishment. A teacher created Venn diagram will be used to showcase the similarities and differences

Instructional Materials

Instructional materials are detailed in the lesson plans above.

Standards

	Maps and other geographic representations, geospatial technologies, and spatial thinking can be used to understand and communicate information.
6.1.5.EconGE.5	Evaluate the economic impact of science and technology innovations on European exploration.
6.1.5.HistorySE.1	Examine multiple accounts of early European explorations of North America including major land and water routes, reasons for exploration, and the impact the exploration had.