1. What is our purpose?

1a) To inquire into the following:

• transdisciplinary theme: Where We Are in Time and Place

An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and interconnectedness of individuals and civilizations, from local and global perspectives.

central idea

Throughout time, people have tried to improve society through exploration of the universe.

lass/grade: 5<sup>th</sup> grade Age group: 10 -11 yrs

School: Willard Elementary School code: 7202

Title: Where We Are in Time and Place (Exploration)

Teacher(s):, Mayer, Rosales, Salgado

Date: 9/25/17 - 11/3/17

Proposed duration: number of hours - 60

1b) Summative assessment task(s):

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

Students will complete a project/presentation of their choice demonstrating their understanding of the central idea. Their projects will include methods, reasons, and impact of exploration, how changes in technology affect our knowledge of the universe. There project can be based on past, present, or future exploration and must include a design based model.

Teacher will assess students ability to explain the pros and cons of exploration in society and how technology has changed our knowledge of the universe.

Through the completion of this unit students should be aware of:

- past exploration, discoveries and the technology used to explore
- the benefits and consequences of new technology used for exploration
- how exploration affects relationships between people groups

Throughout the unit students may demonstrate action such as:

- Being respectful of habitats as they explore their world
- Students may choose to research different exploration missions on their own.
- Students may choose to build models of different vehicles of exploration

2. What do we want to learn?

What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?

Key concepts: Reflection, form, causation,

Related concepts: Exploration, design, curiosity

What lines of inquiry will define the scope of the inquiry into the central idea?

- Methods, reasons, and effects of exploration
- How changes in technology affect our knowledge of the universe

What teacher questions/provocations will drive these inquiries?

- 1. Why and how do people explore the universe?
- 2. How has technology changed our knowledge of the universe?
- 3. What are the benefits and drawbacks of exploration?
- 4. How does exploration affect relationships between people or people groups?
- 5. How does our background influence our perspective of exploration?

#### Provocations:

- OTQ Pictures of different tools used for exploration, pictures of explorers, maps, any type of vehicle used for exploration.
- Videos 7 min terror, space missions, clip Apollo 13- problem solving



## 3. How might we know what we have learned?

This column should be used in conjunction with "How best might we learn?" What are the possible ways of assessing students' prior knowledge and skills? What evidence will we look for?

Use OTQ pictures to assess student knowledge before beginning the unit.

Use Kagan Structures to stimulate conversation and to identify what is already known.

What are the possible ways of assessing student learning in the context of the lines of inquiry? What evidence will we look for?

Through exit tickets, quizzes, partner share, construct graphic organizers teacher will assess students' understanding of explorations

Through research of past and present explorations teacher will assess students ability to:

- name reasons and methods used for exploration
- identify how technology supported exploration and identify its benefits and or consequences
- evaluate and name motives of various explorations through different lenses.

Through students development of an original plan of exploration investigating something unexplored or unknown and the designing a new piece of technology, teacher will assess their ability to demonstrate creativity, motive, and design and carry out a plan.

# 4. How best might we learn?

What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?

- Students/teacher will research and compare past and present methods and reasons of exploration.
- 2. Students/teacher will investigate technologies used for exploration over time.
- Students/teacher will analyze motives, reasons, benefits and consequences of various explorations through the different lenses.
- 4. Students/teacher will research space and earth explorations, and the knowledge gained in various formats.
- Students/teacher will develop an original future plan of exploration investigating something unexplored or unknown and using new self-designed technology including models and visual representations
- Students will write narratives about an exploration mission to a real or imaginary place.
- 7. Students will complete a project/presentation of their choice demonstrating their understanding of the central idea. Their projects will include methods, reasons, and impact of exploration, how changes in technology affect our knowledge of the universe. There project can be based on past, present, or future exploration.

What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?

# Transdisciplinary skills

Research Skills: Formulating questions, collecting, recording, organizing, and presenting data as students

Communication Skills: listening, speaking, reading, writing, and presenting as students listen and respond to presentations on explorations.

Thinking Skills: evaluation, acquisition, and metacognition as students research and evaluate the different methods and times of exploration, and as they create original exploration devices, narratives, and and pros and cons of different explorations.

#### Profiles and Attitudes:

Knowledgeable, risk-takers, thinkers as students learn about past and present explorations and evaluate their benefits and consequences.

Commitment as students look at what it takes to plan and carry out an exploration.

## 5. What resources need to be gathered?

What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?

Various books, videos, DVD's, websites dealing with exploration. Open Court – Astronomy Unit, Going West Unit, Our Nation-Social Studies Book,

How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?

Willard Library, Computer lab Classroom environment will be conducive to classroom discussions and cooperative research where people's opinions and cultural traditions are respected. The community will be used for multicultural field trips to heritage museums. Classes will invite individuals of different cultural backgrounds as guest speakers?