Planning the inquiry

1. What is our purpose?

1a) To inquire into the following:

- **transdisciplinary theme**

Where we are in place and time

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

- **central idea**

Cultures develop explanations for mysteries of nature.

Class/grade: 5th grade Age group: 10-11

School: Poe Elementary School code: 49497

Title: Where We Are in Place and Time

Teacher(s): Baber, Crump, Rankin, Salinas, Stout, Truax

Date: October 20 – November 20, 2020

Proposed duration: 4-5 weeks

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 choose and analyze a myth that explains a scientific phenomena. The students will summarize the myth and compare and contrast to scientific explanation. Afterwards, students will construct a plot diagram for their myth.

Acceptable forms:

* Poster

* PowerPoint

* Essay Form

* Illustrated Booklet

* Venn Diagram

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?

Causation, Function, Connection

Related Concepts: Storytelling, scientific reasoning, beliefs

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

- **Creation of origin stories**
- **Interconnectedness of the natural world and civilizations**
- **Scientific discoveries**

What teacher questions/provocations will drive these inquiries?

- How do myths relate to our scientific world?
- What are some of the larger themes in myths that are important to cultures? What are some similarities and differences between origin stories?
- Why would cultures use myths to explain and teach the natural world and life lessons?

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?

Students will brainstorm what they know about origin stories. Students will discuss what origin stories are and why they were written.

Teachers read aloud the Creation Myth from Ancient Greece and probed vocabulary recognition with specific gods and monsters. Teachers helped to make connections between Space Science and Uranus.

Teachers are also reading aloud Percy Jackson to connect their fiction preferences with Ancient Mythology.

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

Students will create a visual representation of their myth.

Students will create a written explanation of their myth and the science behind the myth.

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?

- Linking the natural world and mythology project
- Linking geometry to civilizations planning their cities project
- Comparing and Contrasting different origin stories and creating a mind map of how it links to cultural values and beliefs
- Researching how early scientists use scientific reasoning to discover that the earth revolves around the sun and that we are round and rotate instead of flat and stationary
- Exploring how Native Americans use natural resources in their environment.

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

Students will learn how to be open-minded by comparing different civilizations' origin stories and understanding their cultural importance. They will be open-minded as they look at the Intolerable Acts from many points of view in the King's Pieces.

Students will become knowledgeable by researching different natural occurrences and presenting their research. They will become knowledgeable of how we use geometry in city planning by creating their own community.

Students will be inquirers as they research the ties between a chosen myth and the natural world. They will become inquirers as they try to understand the link between geometry and navigation. They will be inquirers when they participate in the King's Pieces activity and look seek out different opinions and points of view.

Students will learn cooperation with reenacting colonial America during the intolerable acts and during rotations for math and reading. Students will learn cooperation during Sun-Earth-Moon rotation/revolution lab.

Students will show independence in their research and execution of myth and geometry projects.

Students will show commitment in the quality of breaking down and analyzing their myth and their communities. Students will show commitment in trying to recreate natural phenomena and elements of history to the best of their understanding, and in efforts to deepen their understanding.

They will develop their research skills with their myth/natural world project and their geometry neighborhood project. They will develop communication and thinking skills as they present research and participate in reenacting the colonial community during

	the intolerable acts. Chart the progression of protagonists' and antagonists' development as they explore different ways to meet their needs or wants. Research skills-gather information from primary and secondary resources, describe and record data, effectively present research data Communication skills- reading, writing, speaking, presenting information Thinking skills-gain specific facts, ideas, and vocabulary, communicating and interpreting learning Students will research their own myth and be able to explore the scientific phenomena behind the myth. ∉ Teachers plan together on a weekly basis reviewing the IB Unit of Inquiry. All teachers have the current IB Unit up in their classroom in order to make connections and use as a reference to the central idea. Social studies - Exploring how Native Americans use natural resources in their environment. Math- Fibonacci Patterns, Numbers in nature Reading- Origin Stories, Myths, Fables, Tall Tales,

5. What resources need to be gathered?

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

- Percy Jackson
- Geometry Town
- King's Pieces
- Geometry Art (videos on Piet Mondrain)
- Pompeii eruption
- Raven & Coyote
- Greek & Roman Myth books, Norse Myth books, Egyptian Myth Books

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

Students can look at the community to see how geometry is used to build neighborhoods. The classroom can turn into Parliament to facilitate the debate on 'No Taxation Without Representation.'

Reflecting on the inquiry

6. To what extent did we achieve our purpose?

Assess the outcome of the inquiry by providing evidence of students' understanding of the central idea. The reflections of all teachers involved in the planning and teaching of the inquiry should be included.

Students will be able to describe the scientific reasoning behind their chosen myth and see how cultures develop explanations for mysteries of nature.

How you could improve on the assessment task(s) so that you would have a more accurate picture of each student's understanding of the central idea.

No changes necessary to improve accuracy.

What was the evidence that connections were made between the central idea and the transdisciplinary theme?

Students could find connections between natural mysteries and their personal cultural background.

7. To what extent did we include the elements of the PYP?

What were the learning experiences that enabled students to:

- develop an understanding of the concepts identified in "What do we want to learn?"

Key Concepts: Causation, Function, Connection

Related Concepts: Storytelling, scientific reasoning, beliefs

Students participated in class discussions to develop understanding of reason people are currently moving globally from one location to another. As a group students used currents reasons to develop reasons North America was explored as settled

- demonstrate the learning and application of particular transdisciplinary skills?

Communication skills- Students presented their project orally to their peers. The student's communication of ideas to their peers expressed their interest and excitement of the knowledge gained.

Thinking skills-The students interpreted information gathered during their research. They also gave thought to how they could best present their findings.
Social skills-The students will show respect when observing each other's presentations.

- develop particular attributes of the learner profile and/or attitudes?

Thinker- Students developed thinking skills through the researching of their topic. As they researched their topics, students developed skills for interpreting information as well as relating the information to their classmates.
Inquirer- As the students performed their research they generated additional questions to fill the need for information to satisfy their need for understanding.

In each case, explain your selection.

Reflecting on the inquiry

8. What student-initiated inquiries arose from the learning?

Record a range of student-initiated inquiries and student questions and highlight any that were incorporated into the teaching and learning.

Students took the opportunity to not only do in depth research of various cities but also teach their peers the knowledge gained on the topic. A majority of students used the assignment to gain greater knowledge of their own culture and helps their peers have a glimpse into their upbringing. As students were making presentations, their classmates were asking higher level questions to inquire about the various cultures.

What are the differences between settlement and migration?
How does settlement affect population growth?
How do basic needs affect settlement?
How do new populations change the patterns of established populations?
What drives modification?
How do resources affect movement?

Students inquired about why our student populations was the make-up it is. This led into discussion of reasons our families migrate from place to place and how our country, city, and school have changed. The students developed ideas of past change based on the changes they currently observe.

What student-initiated actions arose from the learning?

Record student-initiated actions taken by individuals or groups showing their ability to reflect, to choose and to act..

Students used this opportunity to explore reasons for change. They sought out information on what drives modification and how modification impacts populations and resources. They enjoyed being able to blast to the past to observe the changes that have occurred over hundreds of years. Students were able to reflect on and tie the changes they saw occur over hundreds of years to the global concern of change today. Students were able to use the past to inform others to make wiser choices as well as they proceed.

9. Teacher notes

The thoughts and ideas in this planner tie in with Where we are in place and time. The students appreciate using the past to positively influence the future.

Next time, we could address where we live, how we got here, and how it all influences how we live.