Planning the inquiry

1. What is our purpose?

To inquire into the following:

- Transdisciplinary theme: **How We Organize Ourselves**
- Central idea **: Individual decisions shape an economy**

An inquiry into economic activities and their impact on humankind and the environment.

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?

Formative assessments (teacher created)

Reading 6th of February

Math 7th of February

Science 8th of February

Summative 1

Teacher will create a Summative Assessment from questions generated after a student led QFT activity.

Goal: Have 5 student-generated questions for the summative assessment. Students will answer these questions at the end of the unit.

Theme: The Impact of Alternative Energy to the Society.

Process:

Question creating process:
Students will create questions in their own groups. The

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

School: Briscoe Elementary School code: 112

Title: **How we Organize Organize Ourselves**

Teacher(s): M. Dubuque, C. Munoz, K. Li

Date: January 18,2018- February 23, 2018

Proposed duration: 6 weeks

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
- Perspective
- Change

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

LOI #1 Sedimentary rocks, fossil fuels and land formations are slow processes that create change over time**. (Change) 5.7a, b**

LOI #2 Comparing different text and making connections between different text allows readers to interpret different perspectives on similar topics. **(Perspective) 5.3a, 5.11e**

LOI #3 The expansion of US territory is motivated by different reasons such as economics, politics and academics. **(Causation) (SS: 5.4D)**

Math Stand Alone TEKs:

5.4A	5.4 H	5.4 B
5.4E	5.7 A	5.9B
5.4F	5.4 G	

questions will be based on the focus and turn their questions from close questions (if there is any) to open questions. Each group will pick 3 of their best questions to present it to the class. The class will pick 5 questions out of the ones from each group. At the end of the unit, students will answer all 5 questions they have selected in class with examples and evidence from the discussions in class and their own research.	**What teacher questions/provocations will drive these inquiries?** **Science:** In what ways do the forces of wind, water, and ice change the Earth's surface? **(Change) (DOK2)** Explain the advantages and disadvantages of using alternative energy versus using fossil fuels. **(Perspective) (DOK3)** **Math:** **(Perspective)** What types of plans and/or strategies can be used to solve problems?**(DOK 2)** **(Perspective)** How are equations used to represent the relationship between quantities in problem situations? Provide an example. **DOK3** **(Causation)** What is the process for determining the area of the base in a rectangular prism? Explain your reasoning. **DOK 3** **Reading/Social Studies:** **(Causation)** Can you predict the outcome if the United States did not expand its territory back in the 1800s? How would each stakeholders be affected? **(DOK 3)** **(Change)** If you were a resident in the French territory before 1803 or you were living in the far west side, how would your life change after the United States acquire your territory? **(DOK 3)** **(Perspective)** Was Industrialization a beneficial thing to all citizens of the United States? Explain your answer by including the perspectives of people from different regions and backgrounds. **(DOK 3)**

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?

- QFT - Students will inquire about the content/skill that is going to be presented in class. The questions will show the students' prior knowledge. We will look for the depth of the questions as well as the incorporation of vocabulary in the questions (some students might know the vocabulary prior to the lesson)
- Think Pair Share (Point of View: A Package for Mrs. Jewels; Elisa's Diary)
- Compare and Contrast the relationship that exists between the Point Of View in Elisa's Diary and A Package for Mrs. Jewels
- I see, Think, Wonder (Earth's Landforms)
- Gallery Walk (Earth's Landforms)

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

LOI #1 Change: Science

Students will

LOI #2 Perspective: Reading

Students will read, analyze, and interpret the message, point of view, character traits of paired passages.

LOI #3 Causation- Social Studies

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?

Causation

- (Science) Students will conduct experiments to explore the reasons behind the formation of different landforms.
- (Math) Student will work on multi-step problems and they will explain their reasons on why they need to compute certain numbers before others due to the order of operations and the context of the question.
- (Rdg) Students will predict the reason why an author choose to write a text in one Point of View versus another and the pros and cons of choosing a certain Point of view.

Perspective

- (Rdg) Visual representations/graphic organizers based on the similarities and differences of author's Point of View.
- (SS) Read about the Movement to the West and discuss about it from the perspective of all the stakeholders such as Americans, Native American Tribes,Slaves, Colonies etc.
- (Sci) The use of alternative energy provides some people new economic incentives, yet it also harms the financial gains of some traditional businesses. Identify the parties that would be affected by the development of alternative energy and present their viewpoints.

Change

- (Science) Students will conduct experiments with flash light, mirrors and lenses to discover the change of traveling path of light after it hits different objects.
- (SS) Student will create a Before-After Chart to explain the changes brought to humans
- (Rdg) Students will read fiction texts to identify the changes to the characters and infer the theme of the texts.

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

- Self Management:(Codes of behavior) Knowing and applying appropriate rules of operating procedures.
- Thinking (Dialectical thought) Thinking about two or more different points of view

Students will	at the same time; understanding those points of view; being able to construct an argument. ● Thinking (Analysis) Taking knowledge or ideas apart; separating into component parts; seeing relationships. ● Research (Formulating questions) Identifying something one wants or needs to know and asking compelling and relevant question that can be researched. **Learner Profiles:** ● Principled (Reflection) ● Communicator (Perspective) ● Thinker (Causation) ● Knowledgeable (Change) **PYP Attitudes:** ● **Curiosity (Perspective)** ● **Independence (Perspective)** ● **Curiosity (Causation)**

5. What resources need to be gathered?

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

Stemscopes - Science	**NEWSELA**	**GoMath Textbooks**	**Math (KAMICO) STAAR Diagnostics Series Textbook**	
My World-Social Studies textbook Vol.1 (Pearson)	**Motivation Math/Science/Reading**	**Engaging Mathematics**		
Engaging Mathematics	**Journeys Textbook Text: Elisa's Diary, The Package of Mrs. Jewls**	**Step Up to the TEKS-Math Practice Book**		

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

6. To what extent did we achieve our purpose?	7. To what extent did we include the elements of the PYP?
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. 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. . What was the evidence that connections were made between the central idea and the transdisciplinary theme?	What were the learning experiences that enabled students to: ● develop an understanding of the concepts identified in "What do we want to learn?" ● demonstrate the learning and application of particular transdisciplinary skills? ● develop particular attributes of the learner profile and/or attitudes? In each case, explain your selection.

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.

At this point teachers should go back to box 2 “What do we want to learn” and highlight the teacher questions/provocations that were most effective in driving the inquiries.

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.

9. Teacher notes