Big History Project - Unit One
UbD Lesson Plan Template

Stage 1 – Desired Results

Content Standard(s):

- *Students will be able to think across scale in terms of both time and distance.*

Understandings:

Students will understand that…

- Time and space can be viewed from and as various scales from very large to extremely small. And thinking across scales can help us to understand how our universe came to be and how it is interconnected.

Essential Questions:

- Why do we look at things from far away and close up?

Student objectives (outcomes):

Students will know and be able to…

- *Define* thresholds of increasing complexity, origin stories, and scale.
- *Understand* that Big History is a modern, science-based origin story that draws on many different types of knowledge.
- *Understand how* you fit into the Big History narrative, using the concept of "thresholds" to frame your past, present, and future, as well as the history of the Universe.
- *Understand what* disciplines are and consider how the viewpoints of many different scholars can be integrated for a better understanding of a topic.
- *Learn to use* timelines as a way to *compare* the scale of personal and historic events.

- Big History Course Teaching Guide. (2016)

Students will build relationships by…

- *Class and group discussions* about origin stories, scale, thresholds, and varying disciplines and perspectives.
- *Collaborative activities* including Turn (to the person next to them) and Talk (about the topic at hand), Think-pair-share (students take time to reflect on a topic or question before talking to a partner, and then validate ideas with someone else before sharing with the entire class), and Role Assignment (Students are assigned a position to represent).
- *Project-Based-Learning* (PBL) Collaborative projects (Students work in groups to research questions, compose a response and present their findings).

- Big History Course Teaching Guide. (2016)

Stage 2 – Assessment Evidence

Performance Task(s): "GRASPS"

"Complete history of a priceless artifact and it's elemental components"

- Your task as an "elemental historian" **(R)** is to discover and chart the complete history of one artifact **(G)** chosen from the local natural history museum **(Si)**.
- The timeline history chart **(P)** that is produced will be displayed along with the artifact **(Si)** at the museum to be viewed by the visitors to the museum **(A)**.
- The graphic (charted) history **(P)** of the chosen artifact will include a summary of each stage in the development of each major elemental or material component (e.g. copper, silver, wood, ruby, stone, etc.) of the artifact from the Big Bang to the present **(St/C)**.
- The chart will clearly depict each stage of development along with important information, (e.g. dates, locations, temperatures, states, phases, etc.) **(St/C)**
- The full color chart **(P)** will be 20x40cm or less and include references and citations **(St/C)**.

Self-Assessments

- A "DQ" (Driving Question) Journal is kept throughout the unit and revisited several times to attempt to answer and revise answers to the essential question "Why do we look at things from far away and close up?" (it is also required to note how own thinking has changed throughout the unit.)
- Rubrics are used to score other students "investigation" essays. Giving insight into requirements and writing process.
- Big History website scavenger hunt (used to determine student's familiarity and competence accessing and utilizing the different parts of the online course website and resources.)

Other Evidence (assessments)

- 2 Vocabulary quizzes (to assess students acquisition of important vocabulary in the middle and at the end of the unit.)
- "Investigation" essays (used to evaluate students' competence in developing a thesis statement and properly structuring a scientific paper.)
- Worksheets on "Scales" (used to assess students knowledge of scales and related conceptual ability.)
- Group "measuring" activities. (To assess students' skill at working in teams and their understanding of various measurement tools and methods.)

Stage 3 – Learning Plan

Learning Activities: "WHERETO" and Rigor/Relevance

- The unit will begin with posing the main essential question "Why do we look at things from far away and close up?" and introduction of the "DQ Journal" (Driving Question) that the students will add to continuously throughout the course. 5 - 10 min. to consider the question and quickly write down first impressions. **(W) (H)** (This can be given in the form of a graphic organizer with columns for initial ideas, revision, and reflection; to be completed at specific intervals) **(R) (Relevant)**
- Topical videos will be watched during class time and at home as part of the blended learning format. **(Ex) (Eq)(Rigor)**
- Worksheet based in-class assignments and group activities will be completed in conjunction with the relevant videos and readings. **(Ex) (Eq) (Relate)**
- The Big History website will be used for resources as part of the blended learning instruction and to help organize the structure of the course. **(W) (Ex) (Eq) (Rigor)**
- Outdoor activities will be used to explore the core concepts of scale and measurement. **(H) (Ex) (Relate)**
- Writing assignments will be used to clarify thesis statements and appropriate writing structure. **(Eq) (Rigor)** Rubrics will be used by students to assess other students writing. **(Re) (Ev) (Relate)**
- Various worksheet and digital format exercises with graphic organizers will be used to clarify the concepts presented in the course material, organize the students thoughts and ideas about the topics, and give them opportunities to create their own ideas and generate perspectives. **(W) (H) (Ex) (Re) (Relevant)**
- Each activity is designed to take no more than 10 to 15 minutes before allowing opportunities to reflect, revise, reorient, review, digest additional material, or move on to another activity. **(Re) (Ev) (Rigor)**
- "Closing" activities at the end of each section are used to consolidate the learned knowledge and skills and use them in a group setting to create a strategy for completing a real-world task and then execute it. The results are then compared with other groups and self-evaluated, then a short reflection is written by each member. **(Ex) (Re) (Ev) (Rigor) (Relevant) (Relate)**

Day 1
Lesson Activities:

- The unit will begin with posing the main essential question "Why do we look at things from far away and close up?" and introduction of the "DQ Journal" (Driving Question) that the students will add to continuously throughout the course. 5 - 10 min. to consider the question and quickly write down first impressions. **(W) (H)** (This can be given in the form of a graphic organizer with columns for initial ideas, revision, and reflection; to be completed at specific intervals) **(R) (Relevant)**
- "Easter Island Mystery" video will be watched (5 min), followed by the worksheet group exercise to brainstorm and decide on possible explanations for the sudden human population changes on Easter Island (10 min). **(Ex) (Eq) (Rigor)**
- Ideas will be shared with the class and discussed (5 - 10 min) **(Re) (Ev) (Relate)**
- A "Big History Website Scavenger Hunt" activity will be completed by students on their own with a worksheet graphic organizer to explore and familiarize themselves with the course website and materials (10 min). **(Ex) (Eq)**
- Finally, a course introductory video will be watched entitled "What is Big History?" (10 min). **(W) (H) (Ex)**
- Homework will be given to watch two videos "Big Bang - Crash Course" and "A Big History of Everything". **(H) (Ex)**

Materials Needed:

- DQ Journal worksheets or pdf
- "Easter Island Mystery" video and worksheets or pdf
- Access for students to computers/internet for "BH Website Scavenger Hunt" and worksheets or pdf
- "What is Big History" video

Feedback Strategies

1. The DQ (Driving Questions) Journal is first introduced at the beginning of the unit as a tactic to activate any prior knowledge or understanding about the topic and with regard to the unit standards;
    a. It's revisited periodically as a form of self-feedback for the students to see how their ideas have changed over the course of study.
    b. Students are asked to use what they've learned to support their answers, and to reflect on how and why their thinking has changed.
2. Sharing ideas from the small group brainstorm worksheet activity about the "Easter Island Mystery" video and discussing them with the class will allow for peer feedback that is timely.
3. The Big History website scavenger hunt has instructions on the worksheet to "check your answers against your classmates' to ensure you've found all the correct information.
    a. If you haven't, ask your teacher about where to go on the site, and then find it yourself." This allows for feedback that is actionable.
4. After watching the "What is Big History? video, the students will be assigned an "exit ticket" to complete before leaving the classroom to summarize the main points of the video.
    a. Students will receive ongoing feedback on summaries like this of videos throughout the course (including the videos assigned for home viewing in this lesson, which will be the entry ticket for the next lesson.)