

An aerial photograph of a lush green agricultural field, likely a rice paddy, with a network of narrow, light-colored irrigation canals or ditches forming a grid pattern across the landscape. The water in the canals reflects the sky, creating a shimmering effect. The overall scene is vibrant and textured.

THE BIG HISTORY PROJECT

TUCSON UNIFIED SCHOOL DISTRICT

11.13.18

A PROGRAM THAT EMPOWERS TEACHERS

PROFESSIONAL DEVELOPMENT

COMMUNITY

TOOL: BHP SCORE

TEACHER PROFILE

The screenshot shows the BHP website with navigation tabs: BHP, UNITS, CONSOLE, and COMMUNITY. A user profile 'EVARISTA OROSCO' is visible. Below the navigation bar are icons for BHP Updates, Assign Tests & Surveys, BHP Score, Manage Classes, and Teacher Resources & Feedback. A 'TEACHING BIG HISTORY' banner with a 'JOIN THE COMMUNITY' button is also present.

BHP Score

BHP Score is a new essay scoring service available free of charge to any BHP teacher. At each milestone, you'll receive results and reports to share with your students the way you want. It ensures teachers and students get high quality, consistent feedback and teachers get back

[ACTIVATE SERVICE](#) [Program Details](#) [FAQ](#)

The diagram illustrates the BHP Score process flow through four stages, each represented by a card with a Wi-Fi signal icon:

- Claim:** Represented by a purple card with a Wi-Fi icon and a hand cursor.
- Analysis:** Represented by a light green card with a Wi-Fi icon and a magnifying glass.
- Organization:** Represented by a light green card with a Wi-Fi icon and a plus sign.
- Language:** Represented by a pink card with a Wi-Fi icon and a speech bubble.

Teachers - Teacher Profile

	2018 W2	2018 W3
	N=102	N=68
BHP Has Changed My Teaching	78%	87%
Confidence Teaching Interdisciplinary	88%	94%
Confidence Teaching Reading	83%	84%
Confidence Teaching Writing	82%	90%
Confidence Teaching Research Skills	96%	97%

TEACHING COHERENCE

THE ROUTINES OF BHP

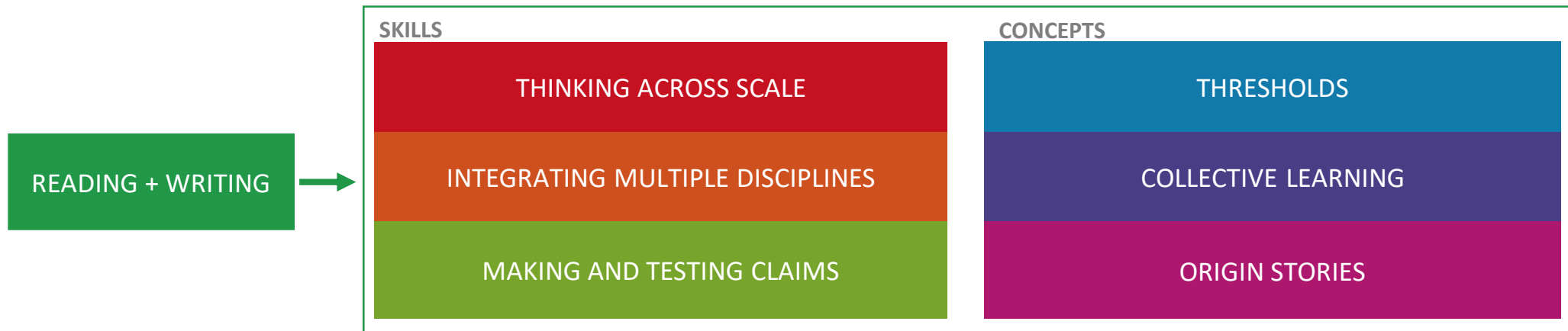
JILLIAN TURNER
BIG HISTORY TEACHER



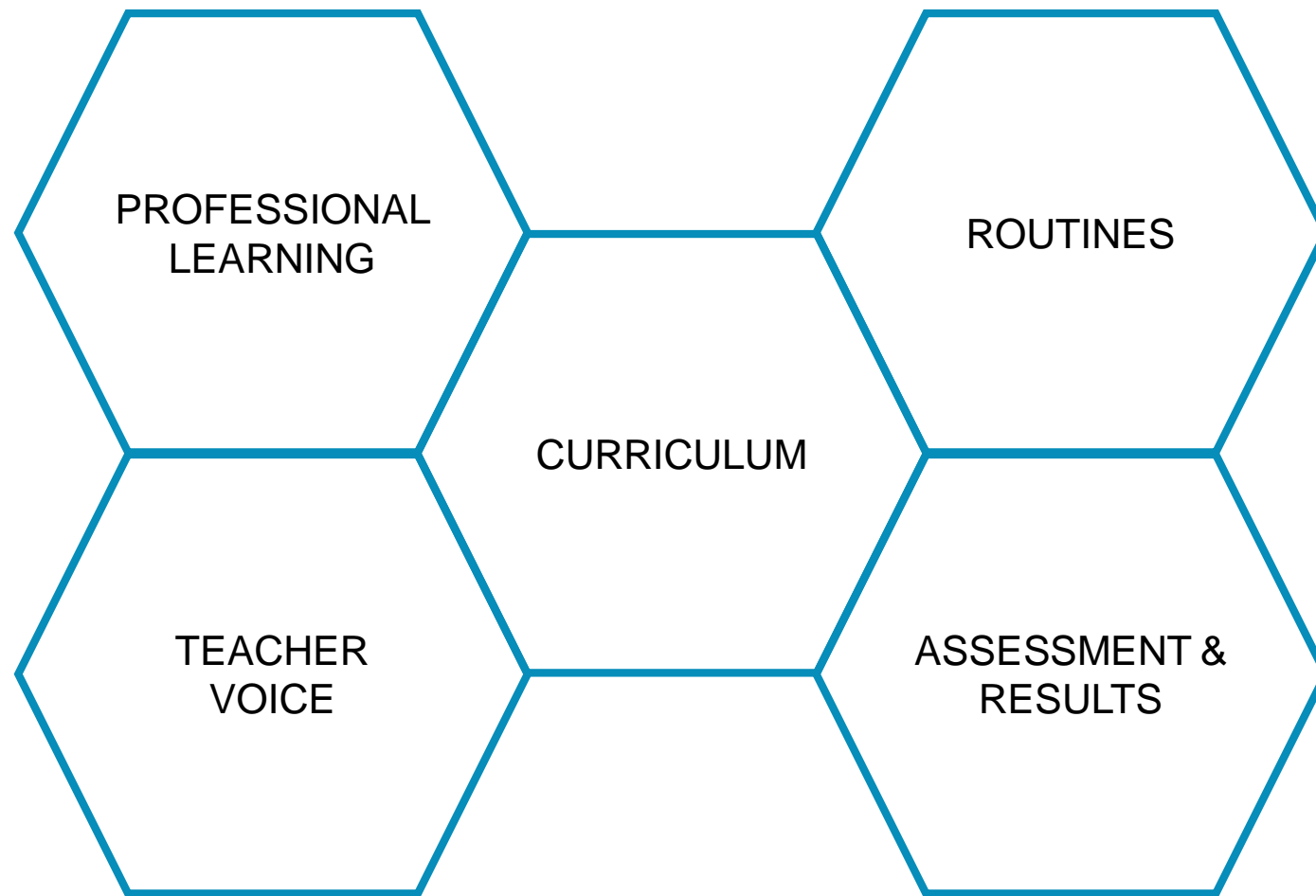
The Big History course has a set of routines that will make your job a little less stressful, while providing students with enough variety to keep them from falling asleep in class. These routines include common activities such as the DQ Notebook, Three Close Reads, and What Do You Know? What Do You Ask? There are also a set of rubrics that you can use throughout the course that will help you and your students understand what aspects of the assignment are most important.

The screenshot shows the 'Teaching BHP: Welcome to the Community' page. It features a search bar, a list of members, and a section for 'UNREAD CONVERSATIONS'. A user named 'Hajra Saeed' has posted a message: 'Good morning, I am going to be teaching Big History to 10th graders in Long Beach. The course looks very interesting, and I am looking forward to using this site as a resource to help me plan my year!'. Another user, 'Allison Lipp', has responded: 'Welcome, Hajra Saeed! If you haven't already checked it out, the new "Teaching Big History" online course is a great place to get started. Go to website > Units > Teaching Big History. In addition, there will be an in-person Big History meeting in San Diego on July 26 - a great opportunity for new teachers and veterans alike to collaborate on strategies for teaching the course. (And some awesome guest speakers to show.) I'll email you the details - would love to hold you a spot!'. The page also includes a 'Write a reply' button and a 'Share' button.

CONTENT AND SKILLS MAPPING



KEY RESOURCES OF BHP

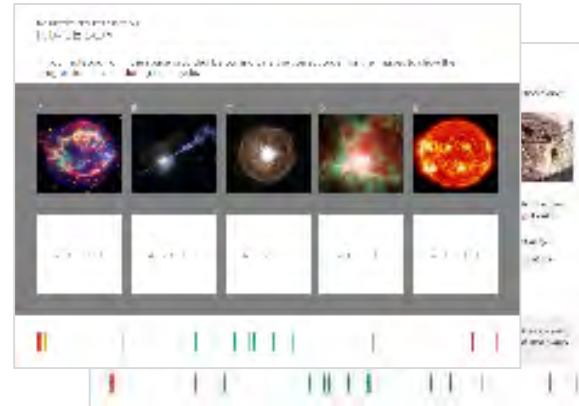


CURRICULUM MATERIALS

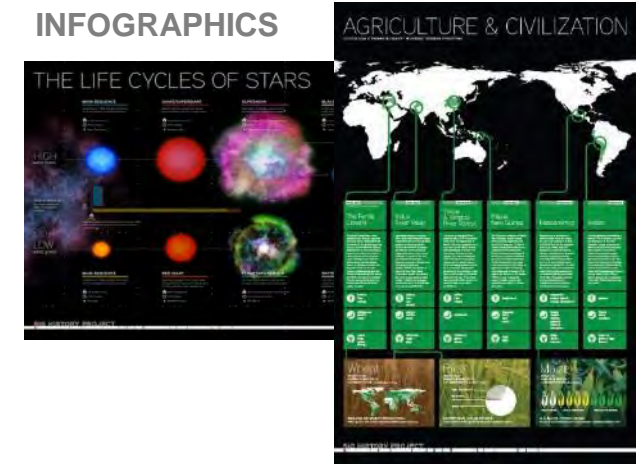
VIDEOS



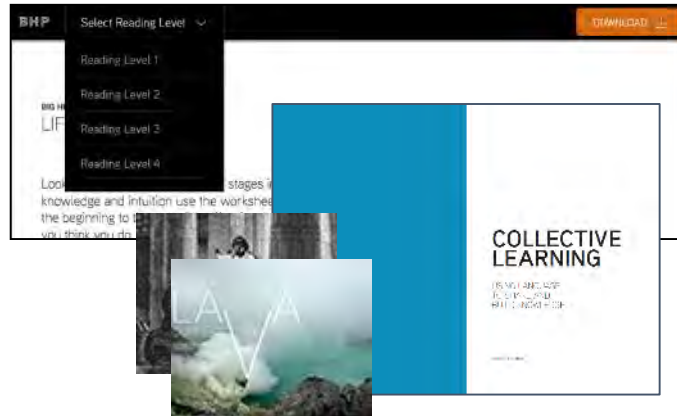
ACTIVITIES



INFOGRAPHICS



TEXTS



LESSON DOCS



PBL ACTIVITIES



INVESTIGATIONS



APPROACH TO READING: HISTORY AS A LITERACY CLASS

THREE CLOSE READS

LEVELED READINGS

VOCABULARY

VIDEO AS TEXT

[illegible]

BIG HISTORY PROJECT

THREE CLOSE READS

Name:
Date:

Remember that in Big History you will do what we call "close reads" of every article you encounter in the course. It won't be long before you get tired of each close read, but while you are still getting used to them, here's a quick guide.

Directions: Before you read, look at what you should "**Pay Attention to...**" Then consider the "**Questions to ask**" in relation to what you should pay attention to while you read. In the "summarizing" column, answer the questions. Below the table synthesize all of that information into a sentence or two.

Reading 1: Capturing Gist

This reading is more of a skim—it should help you get the general idea of the reading.

Pay attention to ...	Questions to ask	Summarizing
Title	What is this article going to be about?	
Headings	Now that you know a little more about the article, what do you think it's about?	
Resource quality	Is this a legitimate source? A primary document? A research report? What does this tell you about the article?	

Close Read 1 Synthesis:

BIG HISTORY PROJECT

BIG HISTORY PROJECT

Foraging Vocabulary

This ToolGlosser report provides a summary of key vocabulary for each article in the course. For each word, you will find the cluster, semantic network and word family as well as examples of the word used in a sentence. To find the definition, you will need to go to the glossary available from the help menu. These reports will help you make sense of the critical words for each text as well as in vocabulary activities.

780L	900L	1020L	1160L
Length: 1803 words Grade: 3 Themes: <ul style="list-style-type: none"> • Time (43) • Size/quantity (25) • Foods/meals (24) • Types of people (12) • Similarity/dissimilarity (11) 	Length: 1511 words Grade: 4 Themes: <ul style="list-style-type: none"> • Time (42) • Size/quantity (37) • Foods/meals (28) • Types of people (18) • Land/water (15) 	Length: 1646 words Grade: 5 Themes: <ul style="list-style-type: none"> • Size/quantity (39) • Time (38) • Foods/meals (31) • Types of people (21) • Groups (16) 	Length: 1604 words Grade: 6 Themes: <ul style="list-style-type: none"> • Size/quantity (41) • Time (37) • Foods/meals (29) • Types of people (21) • Groups (17)

Foraging Words

anthropologist

Cluster:	Occupations
Semantic network:	anthropologist
Word Family:	anthropologists
Examples:	<ul style="list-style-type: none"> • An anthropologist is trained to observe the details that make up a pattern of life. • The anthropologist Robert Braidwood set out to find the area where the domestication of wheat had begun. • An anthropologist who has studied life in both North America and African communities is especially interested in a group of people called the Nacirema.

9.0

THRESHOLD 8 THE MODERN REVOLUTION

0:12–0:39 Threshold is begun about 200 years ago and we're living in the middle of it. We call it the modern revolution because it created the world we live in today.

THE ANTHROPOCENE

Some geologists call the modern era the anthropocene. That's the era in which the Earth came to be dominated by a single species, us. How did we suddenly get to be so powerful?

0:39–1:42 First, we became a global species. After the year 1500, human societies began to link up across the world. This created huge exchange networks in which ideas, technologies, goods and belief systems could be shared. Because collective learning worked on a larger scale than ever before, innovation speeded up.

POPULATION AND ENERGY GROWTH


A second ingredient played a crucial role—our discovery of new sources of energy. The fossil fuels—coal, oil and natural gas—came from fossilized plants and organisms that had stored the energy from sunlight over hundreds of millions of years. Humans learned how to use that energy to power engines of all kinds. Eventually, we learned how to extract energy from nuclear reactions like those that drive the sun. Globalization increased innovation and new energy sources allowed us to build the largest and most complex societies that had ever existed.

Today, billions of people around the world can instantly communicate with each other. With abundant energy, a vast range of new materials from plastics to semiconductors, and an astonishing number of new machines, many humans live better than ever before.


However, all of this new complexity has consequences. The energy and the food we produce has to support nearly seven billion people. That requires a huge portion of the Earth's resources. Human technology and activity is literally transforming the biosphere.

1:42–2:29
CONSEQUENCES


VIDEO




MP4 / 2:37 MIN



Threshold 8: The Modern Revolution





If I find the cause,
I need to go to the
well as well.

4 words

Quantity (41)
(37)
Units/needs (29)
of people (26)
or (17)

a pattern of

APPROACH TO WRITING: THINKING ON PAPER

INFORMAL ACTIVITIES

FORMAL ACTIVITIES

WRITING RUBRIC

BHP SCORE

THE BENEFITS OF BOTH FORMAL AND INFORMAL WRITING



Driving Question: How and why do individuals change their minds?

Driving Question (BHP World): How and why did human understanding of the Universe change?

Directions: Use this worksheet in Lesson 2.1, and again in Lesson 2.2 to answer the unit driving question that your teacher has assigned. Try to use what you've learned so far in the unit to support your ideas each time you answer. In your Lesson 2.2 response, also share how your thinking about the question itself has changed since you wrote your answer for Lesson 2.1.

Lesson 2.1	Lesson 2.2	How and why has your thinking changed?
Individuals change their minds when new information arises to support an idea and when the mathematics are changed. Many people changed their minds throughout history is when people thought the earth was flat when its proven to be spherical because of new information, so they changed their minds to believe the earth is round.	Individuals change their minds due to societal norms changing. When other people start believing one idea, individuals will research the idea more and either agree or disagree. Once individuals find evidence for one idea, their beliefs spread to others who can potentially alter their findings. It's an ever growing cycle of collective learning. It can take a long time for a belief to be followed by others.	My thinking has changed because before I thought individuals presented new evidence and people followed like sheep, however, people can either accept evidence or investigate further.



BHP
Score

BIG HISTORY PROJECT WRITING RUBRIC

COMPLETE RUBRIC

	Advanced	Proficient	Developing	Emerging
Claim and Focus* Make a clear claim about the topic early in the essay and focus on proving it.	The essay makes a precise and significant claim based on the topic and/or source(s). The essay maintains a strong focus on defending a directly stated position, using the whole essay to support and develop the claim and counterclaims while thoroughly addressing the demands of the prompt.	The essay makes a clear claim based on the topic and/or source(s). The essay maintains focus on defending an identifiable position, using most of the essay to support and develop the claim and counterclaims while addressing the demands of the prompt.	The essay makes a claim based on the topic and/or source(s), but it may not fully address the demands of the prompt. Counterclaims may not be acknowledged, and the essay may not stay focused on the purpose and task.	The essay makes an overly simplistic or vague claim, or a position on the topic and/or source(s) may not be stated. Counterclaims are not acknowledged, and the essay does not address the purpose, task, or demands of the prompt.
Analysis and Evidence Choose the right evidence and explain how it supports the claim and analysis.	The essay cites the most appropriate and valid evidence to support its claim, drawing information substantively from multiple sources to defend its position and effectively refute counterclaims. The essay demonstrates insightful reasoning and careful understanding of the sources, potentially acknowledging inconsistencies or weaknesses in evidence, and fully explains the relationship between claims and support.	The essay cites sufficient and appropriate evidence to support its claim, drawing information from multiple sources to defend its position and refute counterclaims. The essay demonstrates reasoning and understanding of the sources, potentially acknowledging inconsistencies or weaknesses in evidence, and adequately explains the relationship between claims and support.	The essay cites evidence to support its claim, but it may be insufficient or draw unevenly from available sources. Support may be inadequate in defense of the position and/or refutation of the counterclaim or rely too heavily on summary. The essay demonstrates some reasoning and/or understanding of the sources, though explanations of the relationship between claims and support are not always clear.	The essay cites minimal or irrelevant evidence to support its claim. Support may rely primarily on opinion, reasoning, or summary of the source(s) without clear cited evidence. The essay demonstrates little to no reasoning and/or understanding of the sources. An explanation of the relationship between claims and support is not present.
Organization Present ideas in a structure that enhances the analysis. Use transitions throughout the essay to make	The essay incorporates precise transitions within a sophisticated organizational structure that enhances the relationships between and among ideas and promotes	The essay employs an organizational structure that shows the relationships between and among ideas, yielding a cohesive analysis. Clear transitions	The essay uses a simplistic organizational structure, though relationships between ideas may not be consistently clear. Use of transitions is sparse, repetitive, and/or does not show the connections among sections of the text. A progression of ideas is evident, however, the introduction and/or conclusion may not be fully developed or follow from and support the claim and/or analysis.	An organizational structure is not evident, and relationships between ideas are not consistently clear. The essay may rely as a series of unrelated ideas, as the absence of transitions makes it difficult to see connections among sections of the text. An introduction and/or conclusion is missing from the essay.

UNIT 2 TEACHING THIS INVESTIGATION

How and why do individuals change their minds?

The development of collective learning is a central theme not to course, but in the history of science as well. "In science," Carl Sagan says, "you know that's a really good argument, and then they would actually change their minds and 'see from their eyes'." In developing a "scientific" or "rational" view, the most compelling ideas from all the disciplines, actually are under go profound change. A powerful example of this is our understanding of the universe in the heliocentric model.

This investigation includes a baseline writing assessment. Six students in the investigation library and their understanding of the geocentric view of the universe in the heliocentric view of the universe and why people without change their minds. The investigation includes a baseline writing assessment. Six students in the investigation library and their understanding of the geocentric view of the universe in the heliocentric view of the universe and why people without change their minds. The investigation includes a baseline writing assessment. Six students in the investigation library and their understanding of the geocentric view of the universe in the heliocentric view of the universe and why people without change their minds.

What were the main sources in the investigation library?

Primary Sources

- Path of the planets
- Galileo's letter to the Pope
- Galileo's discovery of the moons of Jupiter
- Galileo's telescope

Secondary Sources

- The geocentric view
- Copernicus's heliocentric view
- The heliocentric view grows in popularity

What is the students' project or presenting task?

Complete the table. We provide a table to help students create various tasks, decide what caused Copernicus and Galileo to of the location of the Earth in the Universe, determine what cause and develop an argument about when people should change their existing beliefs.

What is the students' writing task?

Write an argument. This is a required, in-class writing exercise between the question "How and why do individuals change their minds?" and the question "How and why did human understanding of the Universe change?" In this in-class writing exercise, you may allow students to use all of their research, and their completed tables. Remind students to use as long history concepts, to reference documents, and to address viewpoints as they write their four- to five-paragraph essay.

TEXT 01 THE GEOCENTRIC VIEW

How did the Universe appear to our ancestors before the invention of the telescope? Most people thought the Earth was the center of the Universe. For them, the Earth did not move in the sky and it did not rotate on its axis. Rather, all the planets and stars rotated around the Earth. Historians and scientists call this Earth-centered view of the Universe geocentric ("geo" meaning "to the Earth" and "centric" meaning "in the center") and generally "static" meaning unchanging.

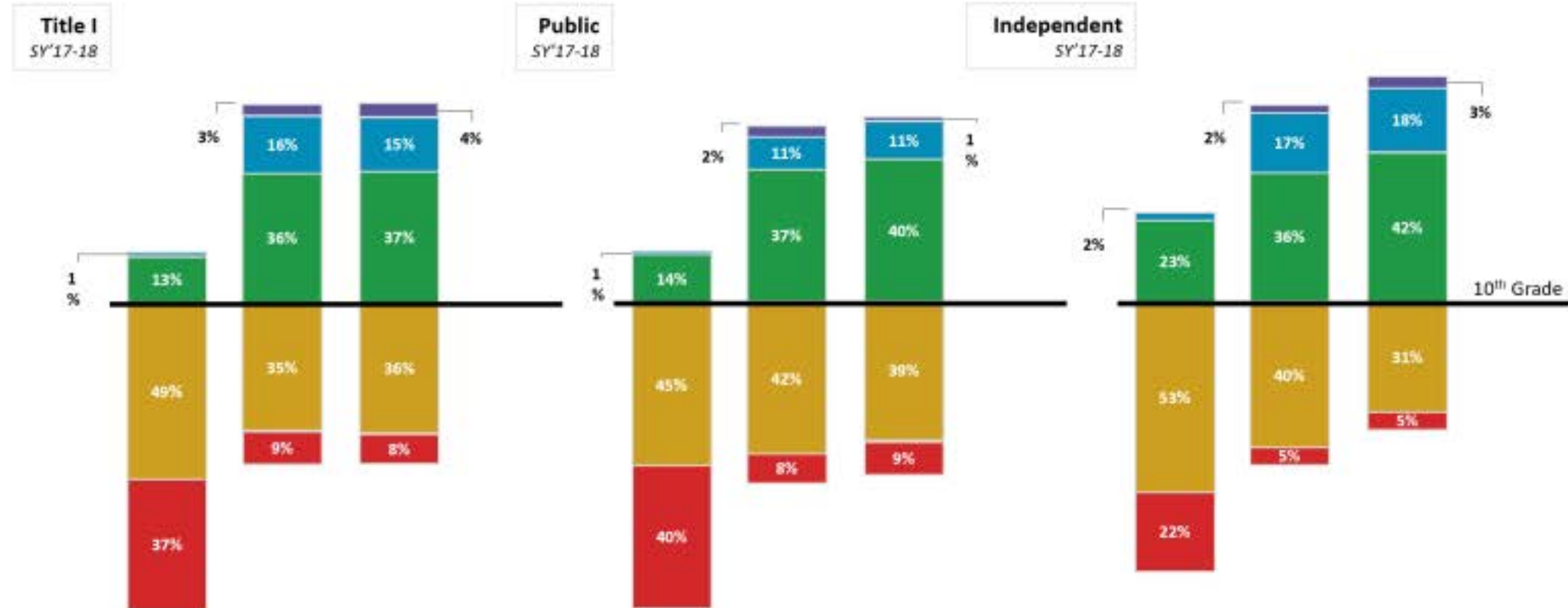
The Greek astronomer Ptolemy (c. 90-165 CE) described the geocentric view of the Universe in his *Almagest*, a book he wrote in about 150 CE. For more than 1500 years, people accepted this view (pictured below) as the correct one. Why would an astronomer like Ptolemy hold a geocentric and static view of the Universe? Why did so many of our ancestors accept this view? In the excerpt below, Carl Sagan, an American astronomer and cosmologist, explains.

Ptolemy believed that the Earth was at the center of the Universe and that the Sun, Moon, planets and stars went around the Earth. This is the most natural idea in the world. The Earth seems steady, solid, immobile, while we can see the heavenly bodies rising and setting each day. Every culture helped to the geocentric hypothesis.



Sources:
Carl Sagan, *Cosmos* (New York: Ballantine, 1980) 28-34.
Illustration by the Big History Project.

BHP WRITING SUCCESS



BHP SCORE: AN INSTRUCTIONAL TOOL

The dashboard features a top navigation bar with 'BHP', 'UNITS', 'CONSOLE', 'COMMUNITY', 'EVARISTA OROSCO', and 'HELP'. Below this is a sidebar with icons for 'BHP Updates', 'Assign Tests & Surveys', 'BHP Score' (highlighted), 'Manage Classes', and 'Teacher Resources & Feedback'. The main content area displays the 'BHP Score' title and a description: 'BHP Score is a new essay scoring service available free of charge to any BHP teacher. At each milestone, you'll receive results and reports to share with your students the way you want. It ensures teachers and students get high quality, consistent feedback and teachers get back what they need most—time.' There are buttons for 'ACTIVATE SERVICE', 'Program Details', and 'FAQ'.

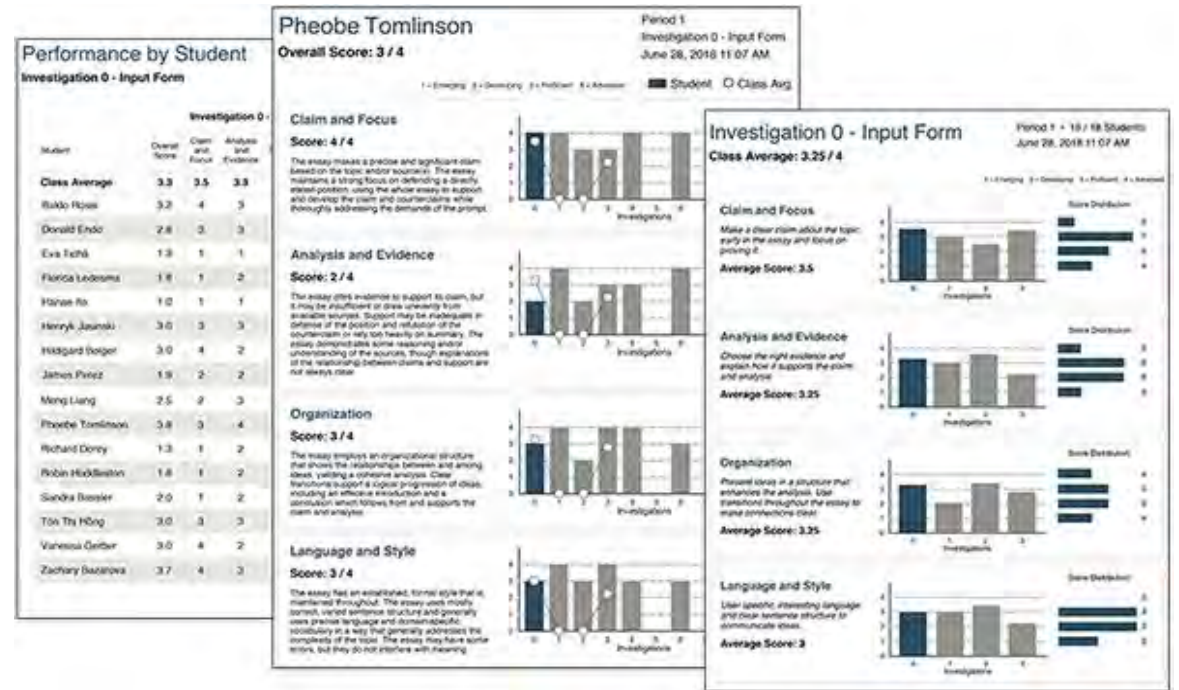
FORMATIVE FEEDBACK

RUBRIC-ALIGNED

CLASS AND STUDENT-LEVEL REPORTS

REAL-TIME FEEDBACK

ALL 10 INVESTIGATIONS



This figure shows a student's essay and a detailed feedback report. The essay text is: 'letter from Galileo, it is likely that this is an accurate... ileo's feelings. The Roman Catholic Church later outlawed... heliocentric view, which very likely led to many more... scholars and astronomers not spreading their ideas (Text 8). Lots of people change their minds because of evidence that they find contrary to the current way of thinking. This is apparent in texts 4, 5, and 7. Copernicus changed his mind about the movements of the celestial bodies because he found errors in the current model of his time (text 4),'. The feedback report, titled 'Claim and Focus', includes a green checkmark and the text: 'This section shows a strong focus on your claim. Have you given the counterclaim a fair amount of attention? Be sure to appropriately disprove each point in the counterclaim.' There are also 'Helpful? Yes' and 'No' buttons at the bottom of the report.

BHP TEACHER COMMUNITY

The screenshot shows the Yammer interface for the 'Little Big Histories' group. At the top, the 'BIG HISTORY PROJECT' logo is visible. The group is a public group with 73 members, managed by Eric Waldstein. The left sidebar lists various units and topics, including 'Unit 6 - Early Humans', 'Unit 9 - Acceleration', 'Unit 7 - Agriculture', 'Unit 10 - The Future', 'Unit 8 - Expansion an...', 'Unit 3 - Stars and Ele...', 'Unit 5 - Life', 'Unit 4 - Our Solar Syst...', 'Unit 1 - What is Big Hi...', 'Unit 2 - The Big Bang', and 'BHP Events'. The main content area shows a post by Jenny Holloway asking for a sample of a well-written big history paper. Below her post, there are replies from Scott Henstrand and Scott Marsden. The right sidebar includes sections for 'Admin', 'Info', 'Pinned' (with a link to 'Big History H2 Episodes'), 'Popular' (with links to '2012 and 2013 Sample Thesis...' and '_1351791621_LBH Banana (1)'), and 'Related Groups'.

Last year, my principal was worried I had no one to work with on BHP. I shared Yammer with her and told her I've never experienced such a powerful network of teachers! – *Hajra S., CA*

Seeing what other people are doing and also being able to ask people for advice or feedback has had a valuable impact on my teaching. – *Brian M., CT*

I played around with a few units this year and I feel much more in control of the content after finishing the training. AND YAMMER is the best online PD platform of which I've ever been a part. It's so active and I love that the teachers check in on us! – *BHP Teacher*