

## Essential Questions

### **What are essential questions?**

Essential questions are critical global, abstract, overarching questions that drive teaching and learning within a unit of study; they press learners to think beyond what they already know; they are the focus of learning and the central questions of inquiry. These questions represent the understanding that teachers most want their students to take away from a unit or activity. They may also be referred to as "Throughlines" or "driving questions."

### **What is the function of essential questions?**

Essential questions...

Point to key inquiries and core ideas of a discipline;

Create a focus for the unit;

Force students beyond the learning of facts to a level of conceptual understanding;

Point clearly and explicitly toward a big idea;

Help students build a schema for knowledge transfer;

Reveal richness and complexity of a subject;

Challenge thinking beyond the facts;

Engage students in examining what's really important;

Engage students in activities that develop processes and skills and lead to content knowledge and conceptual understandings;

Enhance, encourage, and enable cross-discipline connections;

Allow for inductive teaching—guiding students to discover meaning rather than relying mainly on deductive lecture methods;

Aid and encourage thinking at high levels;

Raise other essential questions.

### **What do essential questions look like?**

They cannot be answered satisfactorily in one sentence.

They are concept-based, not fact-based.

They are open-ended.

They are provocative and multi-layered.

They may serve to organize an entire year's curriculum.

They are global, universal, and abstract.

There are usually 2 to 5 per unit.

They may be difficult and esoteric.

### **How should we use essential questions in our classrooms?**

Post essential questions in the classroom, on parent information about a unit, on handouts, and in student notebooks;

Organize notes and unit information around essential questions;

Let essential questions guide discussions, instruction, and investigations;

Refer to essential questions repeatedly;

Ask essential questions over and over;

Connect essential questions with concept maps;

Euloise Williams, instructor Gifted Endorsement Class

2000-2005 Georgia

Share your essential questions with other faculty members.

## Unit/Lesson Essential Questions

### What are unit/lesson essential questions?

Unit questions organize ideas and concepts within a specific unit. They are more specific and concrete and less global and abstract than essential questions. They frame learning, engage learners, provide links to more specific questions, and guide the exploration and uncovering of important ideas. Many believe that every lesson, regardless of how many days it covers, should have at least one essential question.

### What do unit/lesson essential questions look like?

Unit questions...

Are tied directly to a specific idea or subject or discipline;

Have no one obvious right answer;

Are open-ended to accommodate diverse interests and learning styles and to allow for unique and creative approaches;

Are framed to provoke and sustain student interest and thought.

### What is the function of unit/lesson essential questions?

They point to and uncover essential questions through particular topics and subjects;

Open up and suggest multiple lines of research and discussion;

Uncover a subject's controversies, perspectives, and puzzles;

Stimulate thoughts and suggest problems rather than lead a student to the one right answer that the teacher has in mind;

Lead to sustained inquiry;

Establish student priorities;

Focus student and teacher attention on what's important.

Essential Question	Unit Question
Must a story have a moral, heroes, and villains?	What is the moral of the story of the Holocaust? Is Huck Finn a hero?
How does an organism's structure enable it to survive in its environment?	How do the structures of amphibians and reptiles support their survival?
Who is a friend?	Are Frog and Toad true friends? Has it been true in recent U.S. history and foreign affairs that "the enemy of my enemy is my friend"?
What is light?	How do cats see in the dark? Is light a particle or a wave?
Do we always mean what we say and say what we mean?	What are sarcasm, irony, and satire? How do these devices allow us to communicate <i>without</i> saying what we mean?
Is U.S. history a history of progress?	Is the gap between rich and poor any better now than it was 100 years ago? Do new technologies always lead to progress?

Are "good reads" great books?	Is science fiction great literature?
Is there too much—or too little—national power?	Are the limits placed on the federal government's power by the U.S. Constitution realistic and enforceable?

(Part of chart taken from *Understanding by Design*, by Grant Wiggins and Jay McTighe, p. 31.)

### How are Essential Questions related to course or lesson objectives?

*Behavioral objectives state what students will do; essential questions or understanding goals tell what students should learn from what they are doing.* Essential questions tell why the learning activities are important; behavioral objectives focus on action and knowledge or facts. Essential questions are much more powerful in the instructional process than traditional objectives. In a concept-based curriculum, it is not enough to teach only facts related to a topic; we must use broad questions to take thinking to the level of conceptual understanding and to help students build knowledge for transfer. Writing conceptual essential questions requires more thought and universal understanding on the part of a teacher than writing questions directed to specific facts.

### Objectives for Geographic Regions and Cultures of the Pacific Northwest:

- Understand the impact of geographic regions on the development of culture.
- Identify the geographic regions.
- Compare the regions of Washington State.
- List the geographic features for each region.
- Describe how people use their land to meet basic needs.

### Essential Questions for Geographic Regions and Cultures of the Pacific Northwest:

- Why do regions differ?
- How do regions in the Pacific Northwest differ?
- Why do cultures use land differently?
- How do the arts of Native American cultures reflect their natural surroundings?
- How is a culture affected by its geography?
- How is geography affected by a culture?

### Enduring Understandings

*"Education is what remains when we've forgotten everything we learned." Mark Twain*

It is a paradox in our educational system that a student can make all A's and still not truly understand a concept, principle, or idea. We must teach for understandings which endure, which transcend disciplines, and which facilitate transfer to new, unfamiliar situations. Grant Wiggins and Jay McTighe, in *Understanding by Design*, call these "enduring understandings."

### What are Enduring Understandings?

- Enduring understandings are the major concepts and ideas that anchor a unit or a course.
- They are the universal generalizations, big ideas, and important understandings that we want students to "get inside of" and retain after they've forgotten many of the details.
- They go beyond discrete facts or skills to focus on larger concepts, principles, or processes that are applicable to new situations within or beyond the subject. They transfer across time and cultures. The

are exemplified through the fact base but transcend singular examples. For example, we study the enactment of the Magna Carta as a specific historical event because of its significance to a large idea—the rule of law whereby written laws specify the limits of a government's power and the rights of individuals. The big idea goes way beyond its beginnings in 13<sup>th</sup>-century England to become a cornerstone of modern democratic societies.

- They are linchpin ideas—ideas that are essential to understanding of a discipline.
- They are ideas and concepts that have lasting value, that are worth an adult's knowing, and that contribute to making a child a better adult.
- They are "big picture" ideas.
- They have great potential for engaging students.
- They lie at the heart of a discipline and are essential for authentic learning experiences.

### **How do we write enduring understandings?**

- Create a content/concept web that identifies concepts and topics to be included in your unit.
- Write complete sentences which begin with "Students will understand that..."
- Complete the sentence by conveying an important idea about one or more ideas/concepts that will transcend through time and across cultures. This important idea should go beyond the facts while being supported by the facts.
- Avoid using proper and nouns. These should transcend specific people, places, and time periods.
- Use active, present tense verbs to convey a timeless characteristic. Avoid passive voice and past tense verbs. Try to avoid the use of the verb *to be* in any form. Avoid writing simple definitions of a concept (Scale is a range of possible values for a measured property.)
- Use qualifiers (*may, can, often*) for generalizations that may not be true for all examples but that are significant as understandings.

The sophistication of enduring understanding may range from less to more sophisticated. These examples from primary curriculum illustrate this point. Generalizations become more specific, and more concepts are included in the statements as the level of sophistication increases. More background knowledge is required for understanding as the levels increase, and ideas become more cognitively challenging.

### **Example One: (primary)**

- Level 1: People of different cultures show similarities and differences.
- Level 2: Culture influences the dress, customs, and behaviors of a people.
- Level 3: Cultural diversity can lead to conflict.

### **Example Two: (elementary)**

- Level 1: All cultures have celebrations.
- Level 2: Celebrations express the traditions of a culture.
- Level 3: Traditions reflect the beliefs, values, and heritage of a culture.

### **Example Three: (secondary)**

- Level 1: Organisms survive in diverse environments.
- Level 2: Biological adaptations change structures, behaviors, and physiology and enhance reproductive success.

Level 3: An organism's behavioral responses to stimuli evolve through natural selection and often exhibit an evolutionary logic.

**Performances that do not necessarily demonstrate or require understanding:**

Writing memorized definitions on a vocabulary test

Answering questions, either on a test or in a discussion, about facts reported in a textbook.

Writing from memory the formula for solving quadratic equations.

Following the directions in a textbook for conducting a science experiment.

Taking true-false or short-answer tests.

An art activity where students draw a scene from the Boston Tea Party.

Completing a follow-the-recipe-style science experiment.

Being able to translate all the words but not able to grasp the meaning of a Spanish sentence.

Listing the major battles of the Civil War and the winning general for each.

Having students play a game of Jeopardy to learn history facts.

Answering 100 addition problems correctly in 3 minutes.

Making 99%ile on a standardized test.

Answering questions about braking distances correctly on a driver's license test.

Memorizing taxonomic descriptions.

In a science unit, students follow instructions on a kite kit and produce a kite that flies.

Solve textbook problems using Newton's laws

**Essential Questions for Gold Rush**

1. What is value? What makes something valuable? Who determines the value of something?
2. How are people exploited?
3. How does our historical past make us who we are today?
4. What roles do major historical events play in shaping a country's culture, history, and environment?
5. What character traits were most highly prized by Americans in the 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup> centuries? How are they alike or different in different time periods? How did these traits shape historical events? How did historical events shape these traits? How do the art, literature, and music of each century reflect these traits?
6. What is the American dream and how has it changed in different periods of American history? What individuals have personified the American dream?
7. Humans are constantly involved in quests. For what types of general things do people quest?

**Unit Questions for Gold Rush**

1. Why is gold valuable?
2. Why has gold been used by different cultures to produce objects of art?
3. How did the discovery of gold and the gold rush influence our history, culture, economics, language, entertainment, art, literature, and environment?
4. Why might the gold rush be called a "time of exploitation"?
5. What was life like on the gold fields and in mining towns?
6. How did the gold rush affect the lives of men, women and children throughout the U.S. and around the world?

7. How did high demand and short supply shape the economies of gold rush towns?
8. What techniques were used to mine gold and how did these techniques affect the environment?
9. How did a multicultural society affect life in mining towns and camps?
10. What character traits personified gold miners? How do the character traits valued by gold miners compare to those valued at other times in our country's history?
11. How did members of minority cultures affect life in mining camps?
12. How might the gold rush be explained in terms of a quest for the American dream? What are some other events in American history which have both offered and denied people the American dream?
13. What choices did prospectors face both in the mining towns and on their journey to the gold fields?
14. What events/situations in modern times might be compared to the events which took place during the gold rush?

### **Enduring Understandings for Gold Rush**

Students will understand that...

1. Gold has many properties that make it a valuable metal.
2. Many different cultures have used gold to create objects of art.
3. Important historical events leave a rich legacy and a powerful influence on U.S. culture, economics, history, art, literature, and environment.
4. Men involved in quests for riches and a better life often encounter many different obstacles and have many difficult choices to make..
5. Man often exploits the environment for material gains.
6. There are parallels to life in the US today to life in various periods in US history.
7. Individuals are willing to make great sacrifices and take huge risks in hopes of striking it rich.
8. Limited supplies and high demand for goods and services combine to shape economies.
9. A society is shaped by people from different cultures who make up that society.
10. Historical events often mold specific character and personality traits among those individuals who experience them; different types of events mold different characters and personalities.
11. A high-risk, entrepreneurial spirit in American citizens today has evolved through time and is the result of historical experiences.
12. Although a few people strike it rich, many are frustrated, disappointed, and unsuccessful in their quests for wealth and riches.
13. Individuals often search for fame, fortune, and wealth and are willing to make great sacrifices in their quests.
14. Modern events and situations have parallels in historical events.

### **Entry-Point Questions for Gold Rush**

1. What does it mean to be rich? What would you be willing to do to become rich? What risks would you take and what sacrifices would you be willing to make in order to become rich? What compromises would you be willing to make to become rich?
2. What is value? What do you value? What makes something valuable? Who determines the value of something?

### **Essential Questions**

### **Inventor's Workshop: Innovators and Innovations**

1. Why does man create?
2. How does man solve problems?
3. Where do inventors get their ideas? How have chance, serendipity, and mistakes contributed to innovation?
4. How have inventions altered/affected culture, history, society, and economics?
5. How does form follow function?
6. What is the role of innovation in our world? Why is innovation important to our world?
7. How do inventions reflect the time and place in which they are created?
8. What is the role of creative thinking in the inventive process?
9. How have innovations and machines made man's life easier?
10. What character/personality traits enable a person to become a successful inventor and problem solver?
11. How does one assess what makes an invention historically significant?
12. What is the relationship of invention to geography and the environment? Why were certain things invented in certain places in certain times?
13. What are the ethical issues connected with recent medical inventions?
14. Has our definition of artist changed with the technical advances made in the visual and performing arts?