

Theory of Knowledge (TOK) Summer Assignment

Welcome to Theory of Knowledge!

The TOK course allows you to explore and reflect on the nature of knowledge and the process of knowing. You will reflect on the knowledge, beliefs, and opinions you have built up from years of academic studies and your life outside the classroom. So what better text to begin your TOK journey than with Bill Bryson's *A Short History of Nearly Everything*.

A Short History of Nearly Everything* (2004) ISBN 978-0-7679-0818-4

Bill Bryson confronts his greatest challenge: to understand—and, if possible, answer—the oldest, biggest questions we have posed about the universe and ourselves. It's not so much what we know as how we know what we know. How do we know what is in the center of the Earth, or what a black hole is, or where the continents were 600 million years ago? How did anyone figure these things out?

* This book can be found for very low prices online, used or new, hardcopy or digital.

Summer Assignment:

This summer, you'll read one section of the book to start thinking like a TOK student: to question how this knowledge was created, whose voices were heard or ignored, and how confident we can be in what we know.

Step 1: Choose One Section to Read

You may choose any *one* of the five main parts of the book:

1. **Lost in the Cosmos** (on the universe, time, space)
2. **The Size of the Earth** (on geology, mapping, and discovery)
3. **A New Age Dawns** (on biology and evolution)
4. **Dangerous Planet** (on natural disasters and unpredictability)
5. **Life Itself** (on cells, genetics, disease, and humans)

Step 2: Write a Reflective Response (400-500 words)

Your task is to **reflect on how knowledge is constructed and how it connects to you as a knower**. Use the guiding questions below to shape your writing. You **DO NOT** need to answer every question--choose the ones that speak to your reading and thinking.

Guiding Questions:

1. **What did this section reveal about how knowledge in a certain scientific area is produced?**
 - a. What methods or tools were used? Were they reliable?
 - b. Did anything surprise you about how discoveries happened?
2. **What TOK concepts (listed on back) does this section help you explore?**
 - a. How do these concepts show up in the pursuit of knowledge?
3. **How does the knowledge in this section relate to you as a knower?**
 - a. Did it change how you think about science, truth, or authority?
 - b. How much trust do you place in the knowledge you encounter every day?
4. **What questions does this reading raise for you about knowledge?**
 - a. Can we ever be certain?
 - b. Why do we believe in science even when it changes?

This typed assignment is due on the first day of class to submit to Canvas. Be prepared to discuss your thoughts about your selected section of the book. (I suggest bringing your book to class.) REMEMBER THERE ARE NO RIGHT OR WRONG ANSWERS---ONLY INQUIRY!

Example Reflection (for inspiration):

“Reading ‘The Size of the Planet’ made me realize how much of what I think of as ‘obvious knowledge’ is actually built on shaky or shifting foundations. I had never thought about how complicated it was to figure out something as basic as the shape and size of our own planet. What struck me most was how early scientists like Eratosthenes were able to make surprisingly accurate calculations using just shadow, sticks, and math--and how many people still didn’t believe them for centuries.

This made me reflect on the concept of evidence. Bryson shows how tools for gathering evidence---like telescopes, maps, and surveying methods--have changed drastically over time. But what counts as good evidence also seems to depend on the time period, and people involved. Today we see Erastosthenes as a genius, but back then, most people dismissed his work...”

TOK Concept	Description
Certainty	The degree of confidence we have in knowledge claims is how “sure” we can be of certain things.
Culture	The shared beliefs and values held by a particular group can shape what knowledge is valued and how it is interpreted.
Evidence	Information used to support knowledge claims.
Explanation	Making knowledge understandable by providing reasons and justifications for something that occurred; different perspectives can lead to different explanations.
Interpretation	Involves how we make sense of things and information around us, especially the impact of misinterpretation on knowledge.
Justification	The reasons and evidence that are used to support a particular knowledge claim.
Objectivity	Refers to knowledge free from bias and personal influence, taking an objective approach.
Perspective	Refers to how knowledge is shaped by individual and/or cultural viewpoints.
Power	Involves how one may control others to influence the outcome of events, especially how power can influence the production, interpretation, or availability of knowledge
Responsibilitiy	Concerns the ethical implications of producing and using knowledge
Truth	Refers to how real, truthful, or factual a knowledge claim is
Values	Refers to the guiding principles that govern the way people interact with knowledge and what knowledge is considered important

If you have questions or concerns, please feel free to contact me!

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