



INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM



APPLICATION OF CRITICAL THINKING IN IB SCHOOLS

Critical & Creative Thinking
March 02, 2017



International[®]
Baccalaureate

What is the IBDP?



- Started in 1968, Geneva, Switzerland, to provide a **rigorous, consistent high school curriculum** for the children of members of the international diplomatic and business communities.

Expanded Concurrency of Learning



1968



1994



1997



**XAVIER SCHOOL WAS AUTHORIZED AS AN
IB WORLD SCHOOL ON JANUARY 2009**

A word cloud featuring various educational concepts. The words are arranged in a layered, overlapping fashion on a background of a blue sky with soft, white clouds. The words are in two colors: a vibrant teal and a dark navy blue. The largest words, 'Broad', 'Flexible', 'Research', and 'Pre-university', are in teal. Other words like 'Rigorous Assessment', 'Community Service', 'Inquiry', 'Balanced', 'Critical Thinking', 'Choice within structure', 'Develops', 'skills', and 'Reflection' are in navy blue. The overall composition is dynamic and modern.

Broad **Rigorous Assessment**
Balanced
Inquiry **Community Service**
Reflection
Flexible
Critical Thinking
Develops Research skills
Choice within structure
Pre-university



IBDP's Approaches to Teaching (ATT)

“Developing **thinking skills** is a key feature of the constructivist approach that so heavily influences all IB programs.

In this approach, the teacher is seen as a **facilitator** who ‘guides the student, stimulating and provoking the student’s critical thinking, analysis and synthesis throughout the learning process’”

Approaches to teaching and learning in the Diploma Programme, 2015





Academic Strength of IB curriculum

Competency will have been achieved in:

- ★ a first language
- ★ a second language
- ★ social sciences/humanities
- ★ natural sciences/physical sciences
- ★ mathematics
- ★ the arts (theatre, visual arts, music)



Each subject evaluates student performance through an **Internal Assessment/s & External Assessment/s.**

Sample Assessments

Group 1

Studies in Language
& Literature

Individual Oral Commentary/
Presentation
Written Task/Assignment

Group 2

Language Acquisition

Individual Oral Activity
Written Task/Assignment

Group 3

Individuals &
Societies

Research Project/Written Commentary
Portfolio, Historical Investigation,
Experimental Study

Group 4

Experimental Sciences

Investigatory Project

Group 5

Mathematics

Mathematical Exploration

Group 6

The Arts

Exhibition,
Performance

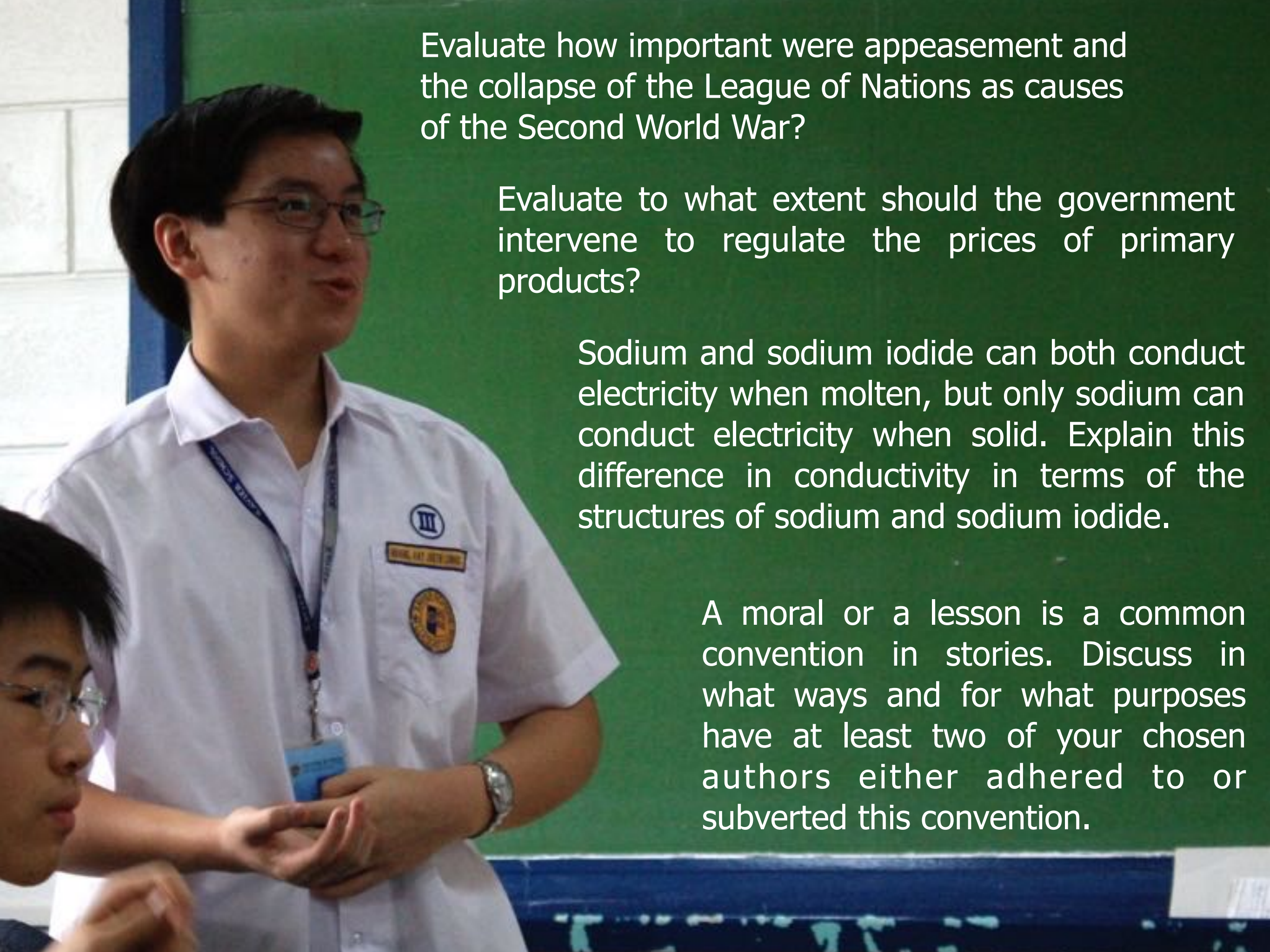




IBDP's Approaches to Teaching (ATT)

“DP subjects place a premium on the development of higher-order thinking skills rather than on simple memorization of content. The higher- order thinking skills DP subjects foster can be seen in the **command terms** used in DP examination papers, where questions ask students to “analyse”, “evaluate”, “compare”, and so on.”

Approaches to teaching and learning in the Diploma Programme, 2015



Evaluate how important were appeasement and the collapse of the League of Nations as causes of the Second World War?

Evaluate to what extent should the government intervene to regulate the prices of primary products?

Sodium and sodium iodide can both conduct electricity when molten, but only sodium can conduct electricity when solid. Explain this difference in conductivity in terms of the structures of sodium and sodium iodide.

A moral or a lesson is a common convention in stories. Discuss in what ways and for what purposes have at least two of your chosen authors either adhered to or subverted this convention.





The IBDP CORE

TOK

Theory of Knowledge is an interdisciplinary requirement intended to **stimulate critical reflection on the knowledge** and experience gained inside and outside the classroom.

CAS

CAS aims to instill in students a habit for **holistic development**, not only of the self but also of others:

Creative: Arts, and other experiences that involve creative thinking.

Activity: Physical exertion contributing to a healthy lifestyle.

Service: An unpaid and voluntary exchange for underprivileged communities.

EE

The **Extended Essay** is a 4,000 word research paper that acquaints students with the kind of **independent research and writing skills** expected by universities.



IBDP's Approaches to Teaching (ATT)

"The DP prides itself on providing opportunities for students to develop thinking skills and also an awareness of themselves as thinkers and learners; something that is most explicitly apparent in the important place given within the DP to the **theory of knowledge (TOK) course**."

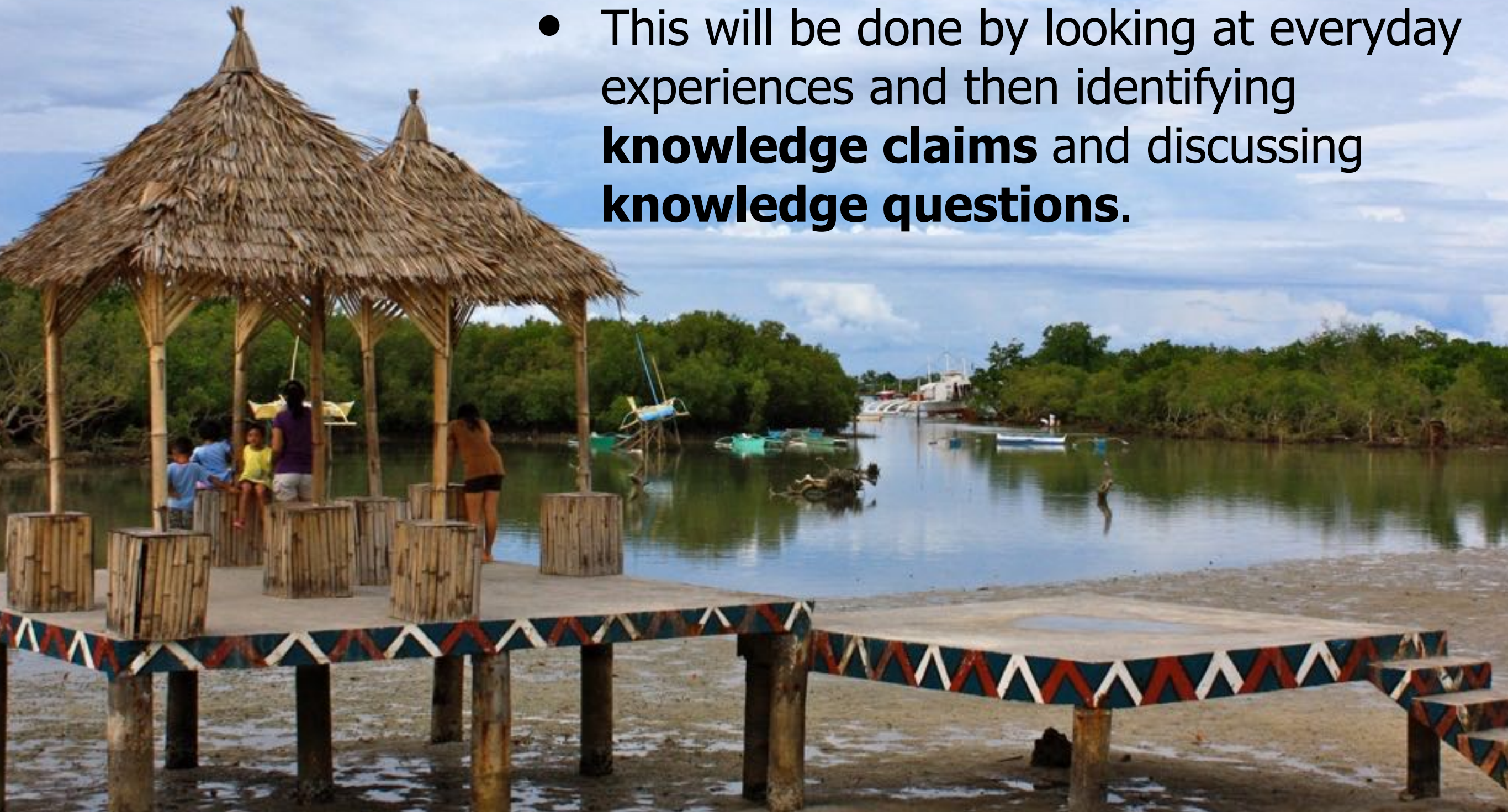
Approaches to teaching and learning in the Diploma Programme, 2015



Theory of Knowledge

TOK is...

- Engaging in a **series of discussion and reflection regarding knowledge.**
- This will be done by looking at everyday experiences and then identifying **knowledge claims** and discussing **knowledge questions.**

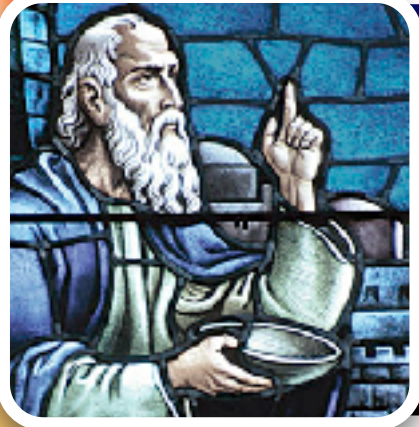




TOK is about...

- taking **real-world experiences**
 - **identifying what we know** or have claimed to know, and then forming and
 - and then **opening it up to questions** that we can critically discuss and connect to other areas.
-

What is knowledge?



“Knowledge is justified
and true belief”

Socrates

Belief

Level of
Certainty

Can we be **fully certain**
of anything?

True

Level of
Universality

Is knowledge simply what
we agree upon?

Level of
Justification

What **evidences** do we need
to prove our knowledge?

Every knowledge claim comes from the **Ways of Knowing (WOK)**

SENSE PERCEPTION

Knowledge that comes from our **5 senses**

LANGUAGE

Knowledge that comes from a **system of communication** using symbols and sounds

REASON

Knowledge that comes from **induction** and **deduction** (reliant on our premises)

EMOTION

Knowledge that comes from how we **feel**

INTUITION

Knowledge that comes from our **hunches or gut feel**

IMAGINATION

Knowledge that comes from our **creativity and metaphysical apprehension**

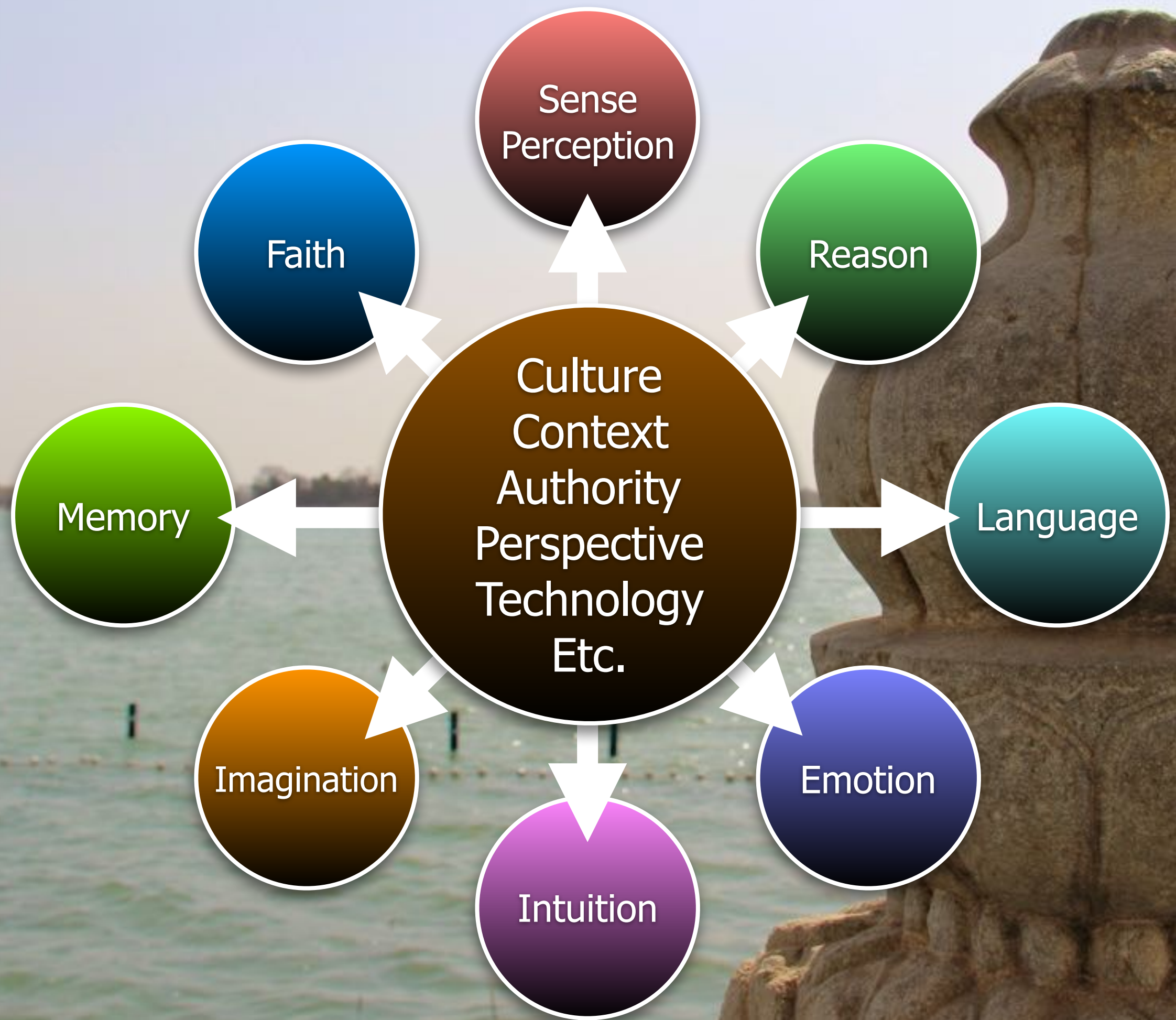
FAITH

Knowledge that comes from our **personal conviction** and **belief** with or without evidence

MEMORY

Knowledge that comes from what we already **know or remember**

BUT the WOK are used to different degrees for every knowledge claim



Mathematics

**Natural
Sciences**

**Human
Sciences**

History

Ethics

Arts

**Religious
Knowledge
System**

**Indigenous
Knowledge
System**



Sample TOK Essay Prompts

1. "It is only knowledge produced with difficulty that we truly value." To what extent do you agree with this statement?
2. "Facts are needed to establish theories but theories are needed to make sense of facts." Discuss this statement with reference to two areas of knowledge.
3. Should key events in the historical development of areas of knowledge always be judged by the standards of their time?
4. "In the production of knowledge, traditions of areas of knowledge offer correctives for ways of knowing." To what extent do you agree with this statement?
5. Given access to the same facts, how is it possible that there can be disagreement between experts in a discipline? Develop your answer with reference to two areas of knowledge.
6. "Humans are pattern-seeking animals and we are adept at finding patterns whether they exist or not" (adapted from Michael Shermer). Discuss knowledge questions raised by this idea in two areas of knowledge.

IBDP's Approaches to Teaching (ATT)



“...metacognition ‘refers to higher-order thinking which involves active control over the cognitive processes engaged in learning’ (Hattie 2009).

Improving students’ metacognitive awareness will help them to become more aware of the ways in which they process information, find patterns, build conceptual understandings, and remember key facts and ideas.

Once they are aware that they are using techniques and strategies to perform even the most basic learning tasks, students can be encouraged to consider if there are more effective or efficient ways to achieve those same outcomes. They can then be encouraged to try new ways of learning and to evaluate the results.”

Approaches to teaching and learning in the Diploma Programme, 2015

For more information:

Visit

www.ibo.org

Read

Approaches to Teaching & Learning

Read

Theory of Knowledge Subject Guide



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