

## Theory of Knowledge Lesson Three: Gaining Knowledge

We begin with a large question: What IS knowledge?

Perhaps, it would help if we narrowed what knowledge is not:

It is not concrete;	it is abstract;
Thus it is not substantive to our senses	it is conceptual

Knowledge is often considered to be **JUSTIFIED TRUE BELIEF**

If we know something, then we believe it.

If we believe something, it could be true or false.

Simply believing does not make it true.

And, something is true separate from our belief; its truth is not dependent on our belief.

If we know something, we also believe it to be true. We cannot believe in something we know is not true.

Truth is objective; belief is subjective. In other words, it is what it is; it is what I believe it to be.

When we know, we are certain.

When we believe, we are not certain.

### TYPES OF BELIEF

**Vague:** some understanding concerning particular beliefs without ready evidence or recollection to support this; a belief that can be easily rejected when presented with counter-claims

**Well supported:** a position that can be supported with evidence, but still somewhat subjective as opposed to objective; thus not certain (more belief than knowledge)

**Beyond reasonable doubt:** supported by compelling evidence with counter-claims easily defeated or refuted, leading to certainty

Belief is not sufficient.

**Justification:** ways of knowing come into play

Knowledge claims, therefore, are supported by ways of knowing.

**Reliability:** evidence emerges from the ways of knowing

**Repeatability:** evidence can be acquired by way of repeated experience

**Responsibility:**

“When you say you know something you are, in  
a sense, taking  
responsibility for its being true.”

Van de Lagemaat

What is the difference between knowledge and information?

**Facts are information:** facts can lead to knowledge, but are not knowledge in themselves. Knowledge is the understanding and explanation of thinking and application that comes working with and reflecting upon facts.

Knowledge, therefore, is a construct, or more specifically, a number of constructs emerging from:

Personal experience

Social interaction

Lifelong

Furthermore,

We take from the past (memory) and apply to the present (empiricism) to make predictions about the future (intuition, imagination, faith).

The most frequently applied way we access knowledge: language

Let us consider another question: What role does the education system play in our acquisition/understanding of knowledge.

Keep the following in mind: no education system is neutral.

Thus, what factors beyond school influence school?

(culture, religion, economics, politics, etc).

Looking more closely at knowledge, it might be helpful to classify/categorize it, at least in large components.

### **DISTINCTION ONE: PERSONAL/SHARED**

Knowledge is...personal

Knowledge is...shared

Question: how would you distinguish personal from shared?

#### **Personal knowledge:**

Not all of it will ever be shared

Some is feeling-based and very difficult to articulate

Some is unique to the individual; we can sympathize and empathize but do not step into the other; we are not capable of becoming metaphors!

#### **Shared knowledge:**

Emerges from sympathy/empathy

Is, in some cases, necessary for the experience to be meaningful

Is, in some cases, necessary for order, progress

Forms community, and over time, such shared knowledge not only becomes implicit (we know without knowing why we know) which creates a sense of belonging (itself implicit to the human condition)

Some such knowledge goes back for millennia

Shared knowledge enables us to act quickly and effectively...imagine the opposite!

Shared knowledge can also be considered as

**Second-hand knowledge: cultural; authority; testimony**

<b>Culture</b>	<b>traditional but open to flexibility</b>
<b>Education systems</b>	<b>as opposed to indoctrination</b>
<b>Expert opinion</b>	<b>fallible, and with limited range</b>
<b>Media</b>	<b>bias, agenda, subjectivity</b>
<b>Internet</b>	<b>as opposed to urban legends</b>

In order to move between personal and shared, or between what I know and what I can get to know, there is what is called the **zone of exchange**

Quite simply, the fluidity between both of these categories of knowledge occurs through communication (discourse, debate, inquiry, acceptance, rejection)

Furthermore, this movement implies active acquisition of knowledge (**transformative**) rather than passive acceptance (**transmissive**)

Thus, the movement is dynamic, multi-voiced, multi-faceted.

**DISTINCTION TWO: EXPERIENTIAL/SKILLS/KNOWLEDGE CLAIMS**

**Experiential:**

Empirical (knowledge gained through experience/received via senses)

Maya Angelou wrote: When we know better, we do better.

Experiential learning: When we do better, we know better.

Experiential knowledge is comprised of the action itself (I as doer) and the reflection after (I as thinker)

Doing involves my interaction with:

- the natural world
- Other people
- Social networks
- Social systems
- Mechanisms/products

It is immediate.

It is overt.

It is active:           the stove is hot; how do you know?

Consider this: Being told something is one form of knowledge; experiencing it ourselves is another.

Furthermore, personal experience (and our consideration of the event after we have gone through it) leads to the acquisition and development of SKILL.

We learn not only from the guidance and instructions of others but 'testing' same, along with gauging our awareness of the event and considering our interpretation of it.

It is non-linear; rather it is circuitous and layered; we add and consider and try again and reconsider.

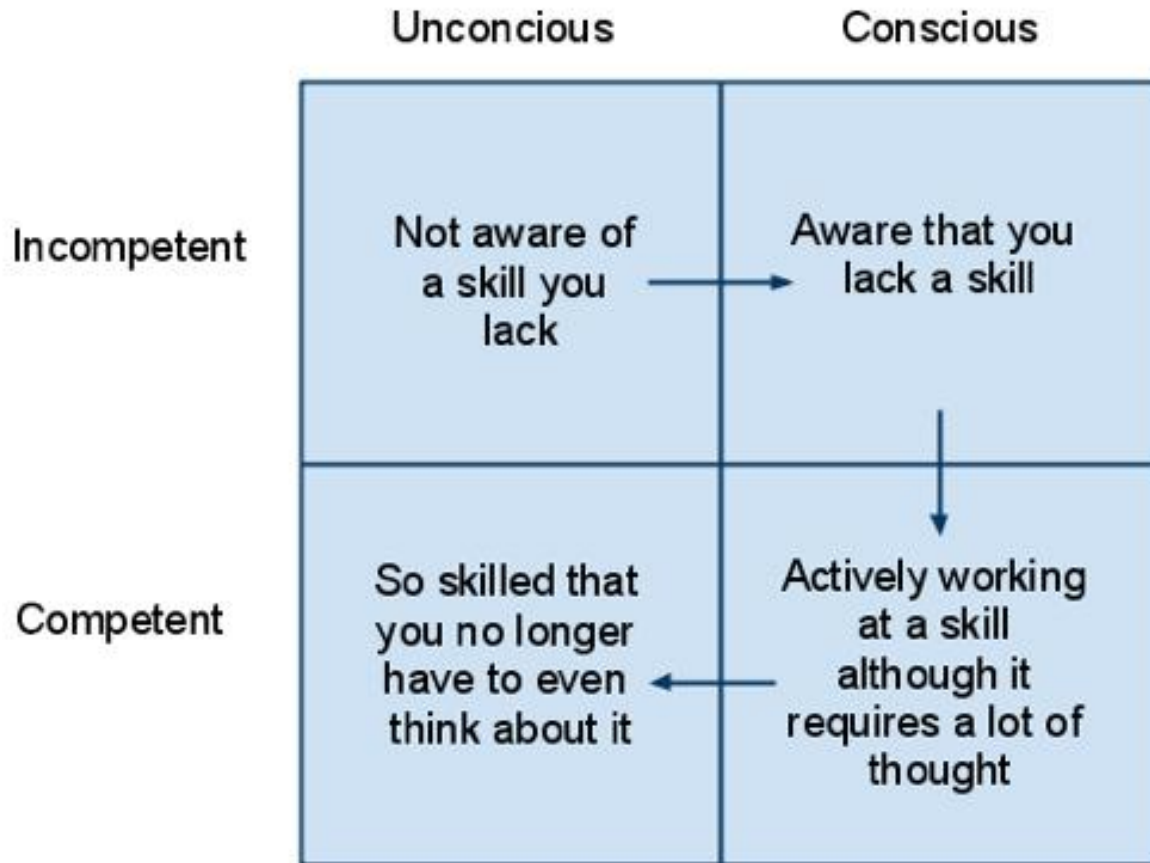
The (re)consideration is essential for deepening this kind of knowledge.

We consider the planning, execution, outcome and what we learned from the experience.

Reflection also enables us the space/time to assess how our perceptions and emotions may have influenced our engagement in the experience; that one cannot always judge from one experience; that connections we draw/conclusions we derive may be false (invalid).

## **Skills**

Here is one of my favorite models, first taught to me by a marathon runner, who having forgotten his sneakers on race day, wound up wearing a pair of my cousin's; they were two sizes bigger!



Knowing in terms of skills leads us to this question:

How do we know we know?

Thus, there is often some measure (tests, exams) or criteria (scale) and there is often **subjectivity** and **bias** factoring into the judging (as I write this there is controversy swirling about the US/Russian judges at the Olympic skating competitions).

Often, skills are acquired over time and then become 'forgotten.' We call this type of skill set **procedural knowledge/procedural memory**.

When we share the skills we have, it is an example of **transferable skills**.

With that in mind, consider another model I love: 21+1

To acquire skills, 21 times; to 'know' you have acquired it: teach it to someone else

In the book, [The Bliss Experiment: 28 Days to Personal Transformation](#), Sean Meshorer shares some research that says the magic number might be 50 repetitions to form a new habit.

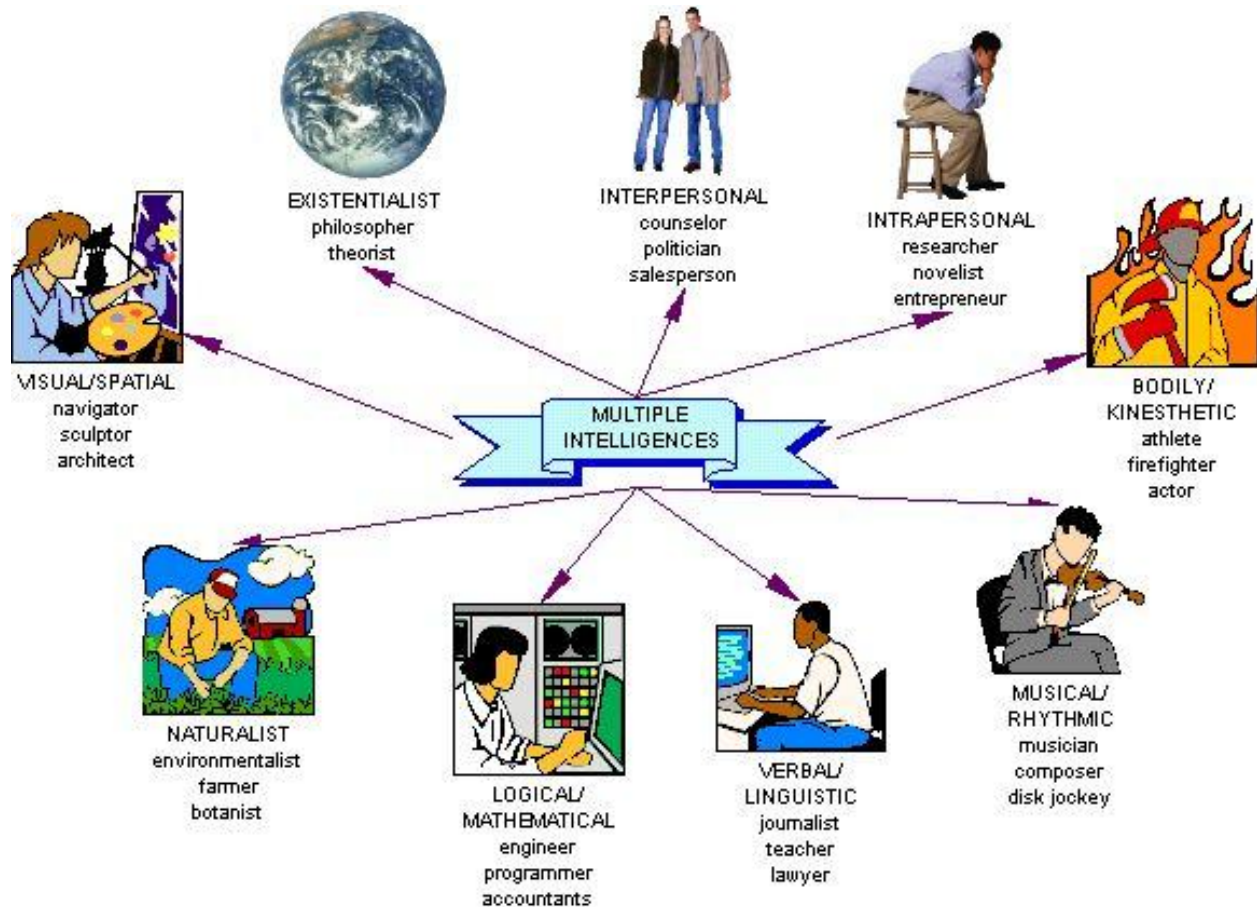
21 Days, 30 Days, Sixty-Six Days, or 8 Months

What's the magic number of days to adopt a habit? It varies. Meshorer writes:

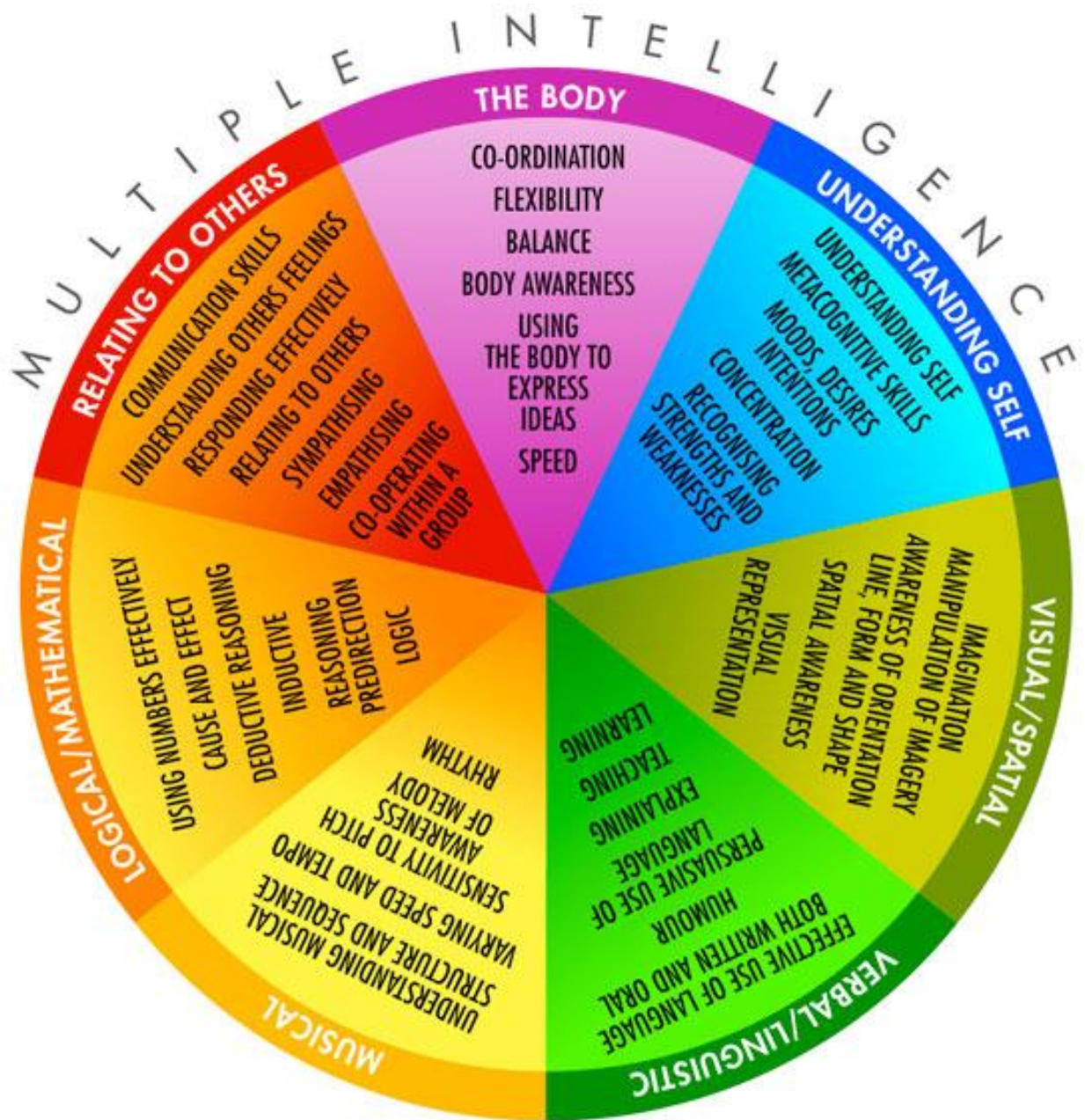
“Studies vary in their findings, but virtually all agree that bad habits can be reversed relatively quickly. The most optimistic report I've seen pegged it at twenty-one days. The worst-case scenario is eight months, but only for the most difficult habits in the worst situations. A study of astronauts by NASA found that it took about thirty days. Other quality studies have put the number at about sixty-six days.”

And what about **Multiple Intelligences**?

Developed by Howard Gardner in 1983,



And another model:



### But how do we acquire skills?

1. Can be as simple as observation
2. And practice
3. However, higher skills also require **critical thinking**
4. **APPLICATION** (also known as use it or lose it)

### Knowledge claims

As defined by IBO: knowledge claims are claims about knowledge.



So, since that is little more than a balanced sentence, let us explore further:

## KNOWLEDGE CLAIMS

Knowledge claims are statements/declarative sentences.

Knowledge claims are about what we know.

Knowledge claims are about WHAT we say we know.

Knowledge claims do not cover all that we know.

(some things are too personal to share; some things, too trivial or mundane)

Knowledge claims are expressed in **language**.

Knowledge claims are stated as being true.

Knowledge claims are more than facts; they are assertions concerning anything we choose to present as true; thus they can be opinions and beliefs, including metaphysical beliefs that cannot be proven within the context of the physical world.

Knowledge claims are means by which we connect personal knowledge with shared knowledge via the zone of exchange.

## TYPES OF KNOWLEDGE CLAIMS

## Statements of personal observation

What we acquire through our senses  
These can be checked  
Personal experience

*I know it is snowing today.*

## Statements of value/value judgments

Qualitative and subjective  
Of value/meaning/significance to the observer(s).  
Cannot be proven true or false.  
Opinions/personal

*I know that Shakespeare is boring.*

*I know I love tacos.*

*It is scorching hot today.*

## Predictions

Based on statements of observation but are not observations  
Follow general patterns established from past to future  
Expectation is the repeated outcome will occur

The Leafs will not win the Stanley Cup this year.

I know that if I do not study, I will not do my best in this course.

## Hypothetical statements

Based on statements of observation but are not observations  
Places two actions in causal connection; if...then.

*If I wear my lucky bracelet, I will pass my driving test.*

## Metaphysical statements

Assertion of spiritual belief  
Cannot be tested with empiricism  
Are beyond the material world

*I know that God created the world.*  
*I know there is Heaven.*

## Definitions

Ideas in relation to each other by way of language  
Distinct; clear

A right angle is 90 degrees.

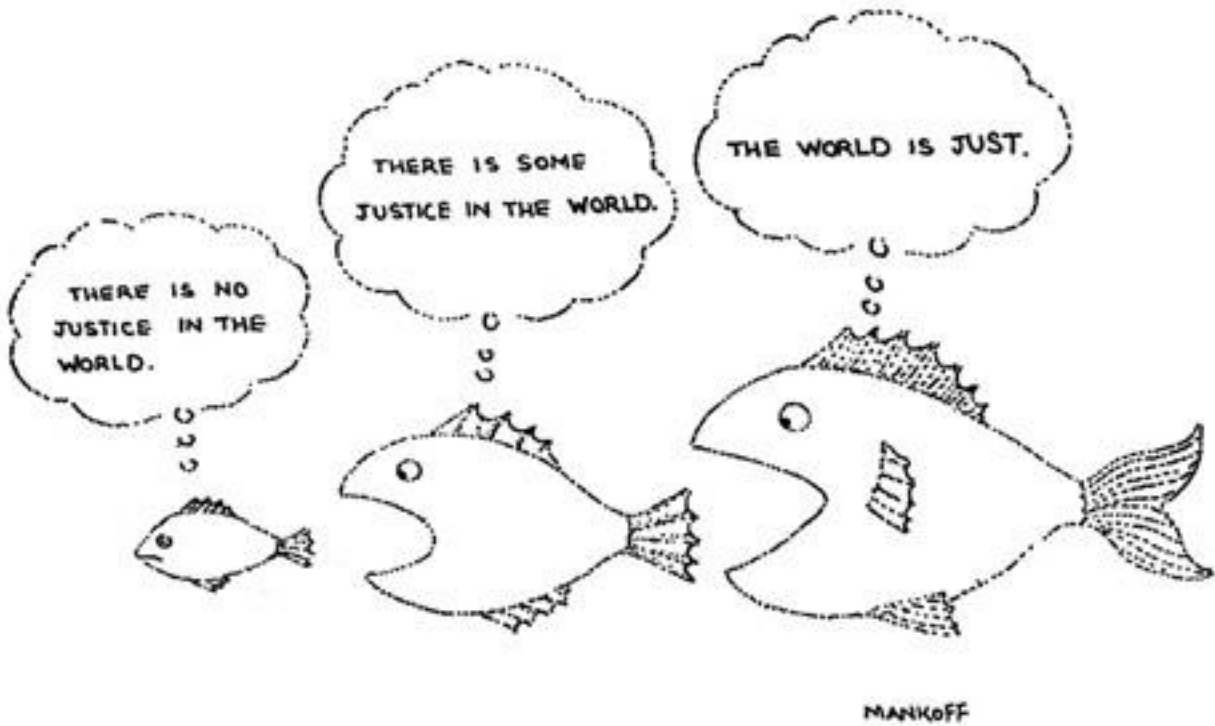
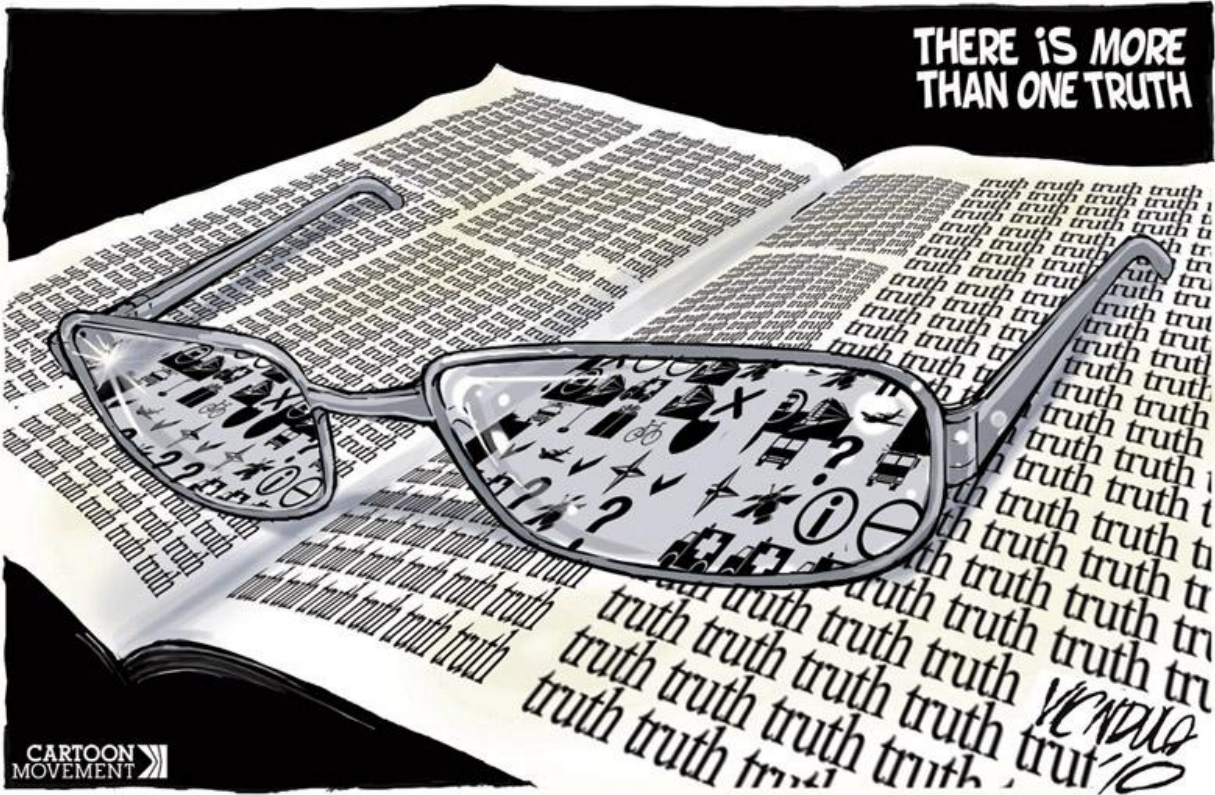
Knowledge claims lead to knowledge questions:  
questions about knowledge itself  
Open to different ways of exploring  
General in scope (deal with concepts, methods, applications)

Within ToK we approach questions from  
Broad -- general -- close  
Or reverse

We then seek to *justify* (validity, truth, application of knowledge claims)

*Seeking Truth (lesson four)*

What is truth?  
How do we tell the truth?  
How do we seek the truth?



Truth: ideally, our perceptions of how things are is precisely how they are,

Really: mired in perspective; inconsistencies; social interactions and knowledge bases

<http://curiosity.discovery.com/question/average-person-tell-lie>

Impediments to truth:

Gullibility and face value  
Knee-jerk response and superficiality  
Hindsight and confirmation biases

Aids to truth:

constructive doubt  
(probing questions/critical thinking)

Constructive doubt:

works against acceptance at face value  
Leads to seeking supporting evidence  
Leads to our deconstructing the source  
Leads to our deconstructing the form/media of the information

*Knowledge Interaction (lesson five)*

Open with these premises: human beings create knowledge  
Knowledge is fluid  
It is exchanged/exchangeable

We apply: perspectives  
Knowledge  
Ways of knowing  
Justification

We consider: the role of assumptions  
The role of value  
The types of knowledge we acquire  
The roles of questions and of claims  
Certainty and what it means to us

We apply these considerations to the ways of knowing:  
Perception  
Intuition  
Emotion  
Imagination  
Rationalism

Faith  
Language  
Memory

Although these will be discussed as separate ways, they overlap and in so doing, create a more encompassing path to ascertaining and reflecting upon knowledge (personal/shared/exchange)

Note to myself: find and assign the WoK project from 2011.

How do we create such an encompassing path?

- Communication (via language)
- Sympathy/empathy (via emotions and imagination)
- Analogy and inference (via rationalism and intuition)
- Recall (memory)
- Experience (shared - perception)
- Demonstration (perception and emotion)
- Direction and instruction (language and imagination and rationalism)
- Acceptance of knowledge (rationalism and faith)

Justification of knowledge claims: (reasons for believing knowledge claims)

- Constructive doubt response
- Truth checks
- Convincing arguments
- Facts, checks, observations