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**NEW ORLEANS 18<sup>th</sup> - 21<sup>st</sup> JULY**



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# THE NEW TOK COURSE

## Presenters

Carolyn Henly

Chris Mannix

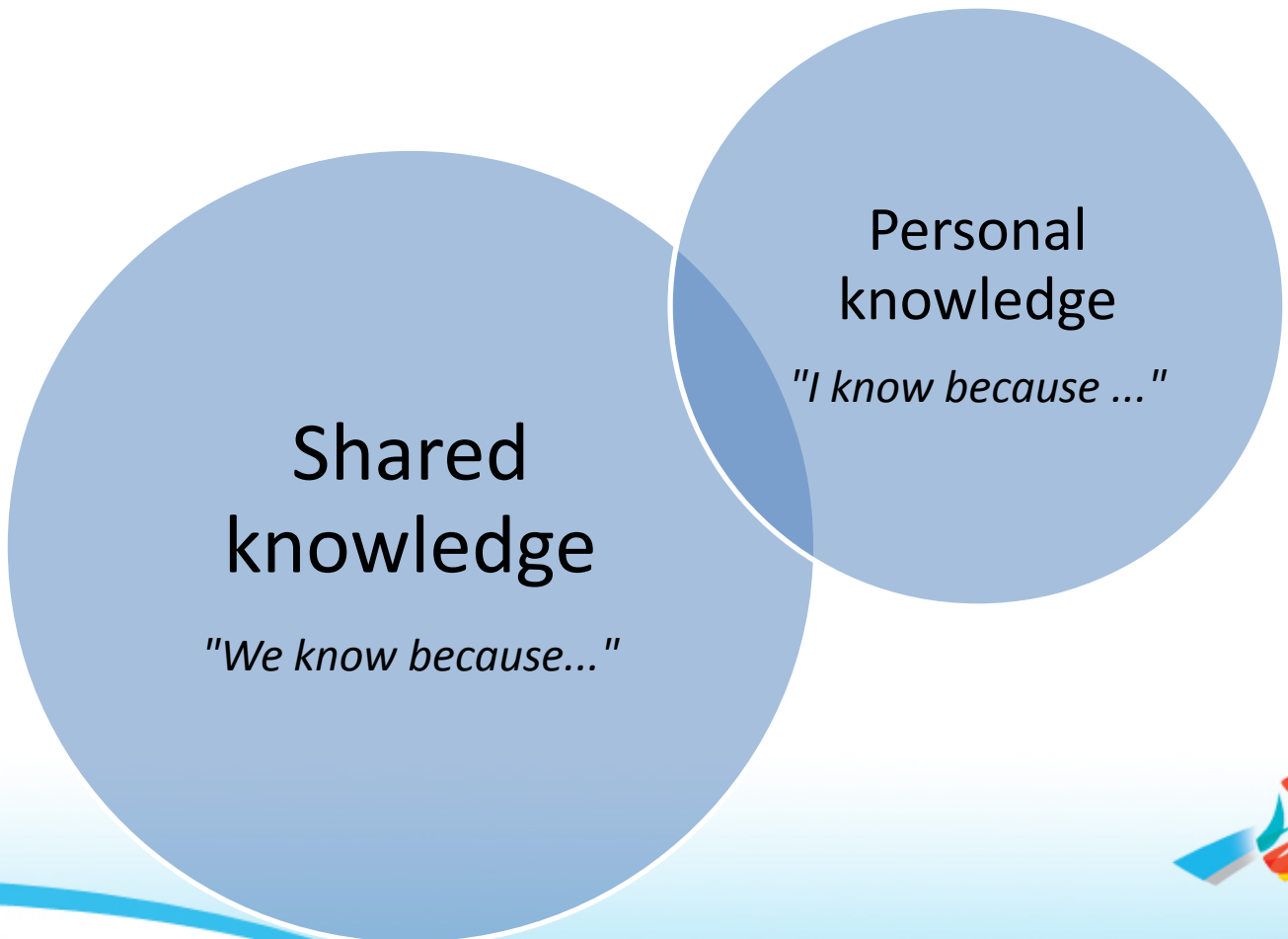
# IMPORTANT CHANGES TO THE TOK COURSE

- A different style of TOK guide and a TSM
- Personal and shared knowledge
- Greater emphasis on knowledge questions
- The introduction of a knowledge framework
- A new assessment model
- New WOKs and AOKs

# A different style of TOK guide and a TSM

- Written with the new TOK teacher in mind
- It is not a prescriptive TOK curriculum
- A TSM to support the guide

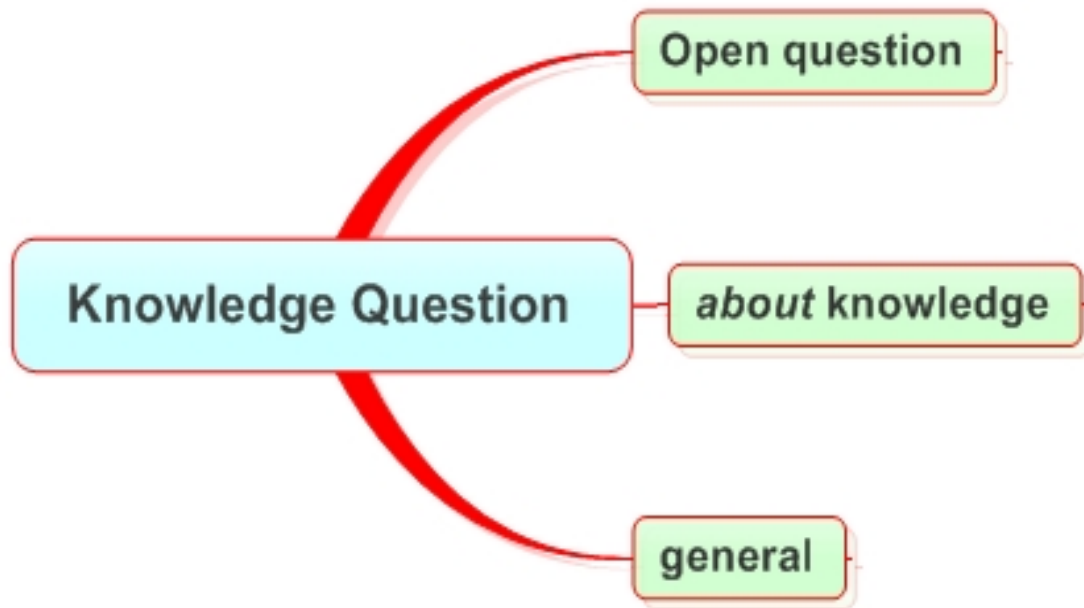
# Personal and shared knowledge



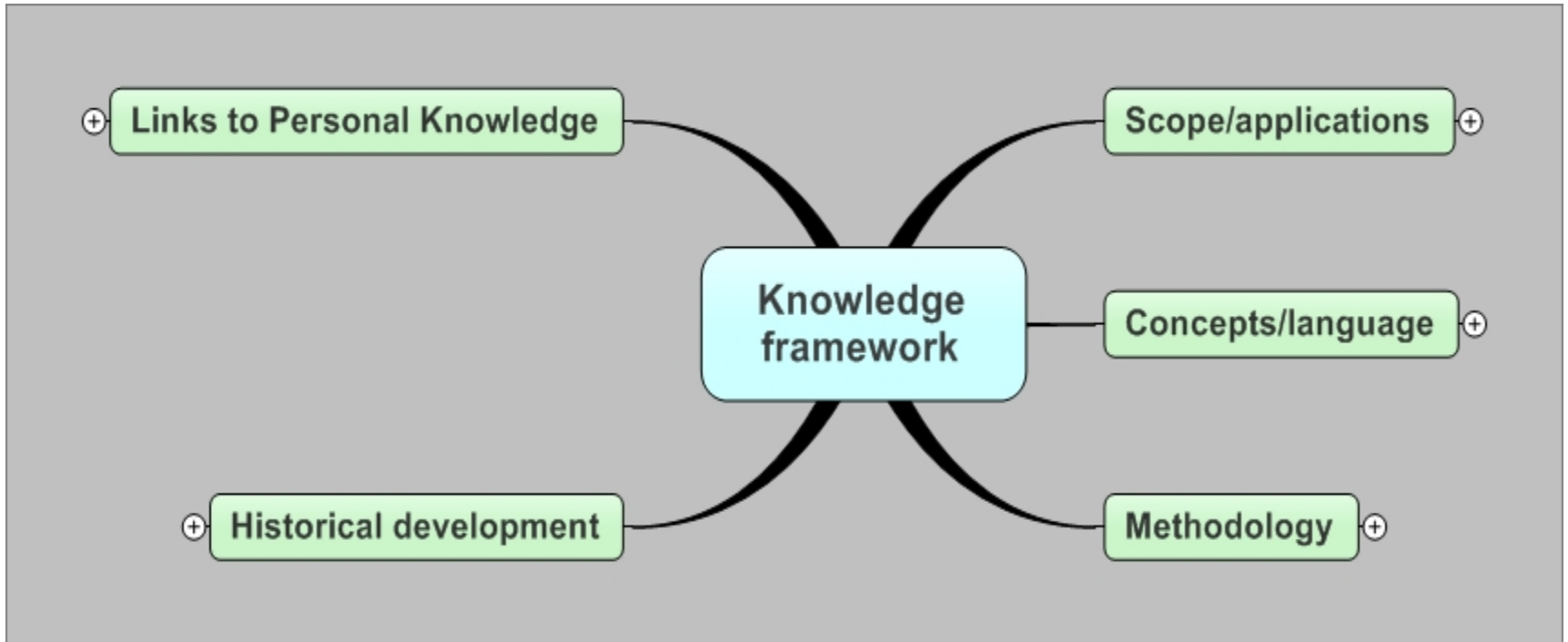
Shared  
knowledge  
*"We know because..."*

Personal  
knowledge  
*"I know because ..."*

# Greater emphasis on knowledge questions



# The introduction of a knowledge framework



# A new assessment model

- Global impression marking
- The essay and the prescribed titles
- The presentation and the PPD



# New WOKs and AOKs

- Imagination, memory, intuition and faith
- Religious knowledge systems and indigenous knowledge systems

# Personal vs shared knowledge

What does this mean for the new curriculum?

# Where you can get materials

302 Azalea Avenue  
Henrico, VA 23227  
IB English & Theory of Knowledge  
<http://henlyhhs2011.zxq.net/>

*Henrico High School*

Carolyn P. Henly  
Teacher  
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## PRESENTATION MATERIALS FOR TEACHERS



### IBA NEW ORLEANS 2013

Theory of Knowledge: "The New Theory of Knowledge Course"  
Chris Mannix, Head of IBCC Development and DP Core  
& Carolyn Henly

[Click Here](#)

### IBMA SUMMER ACADEMY 2012

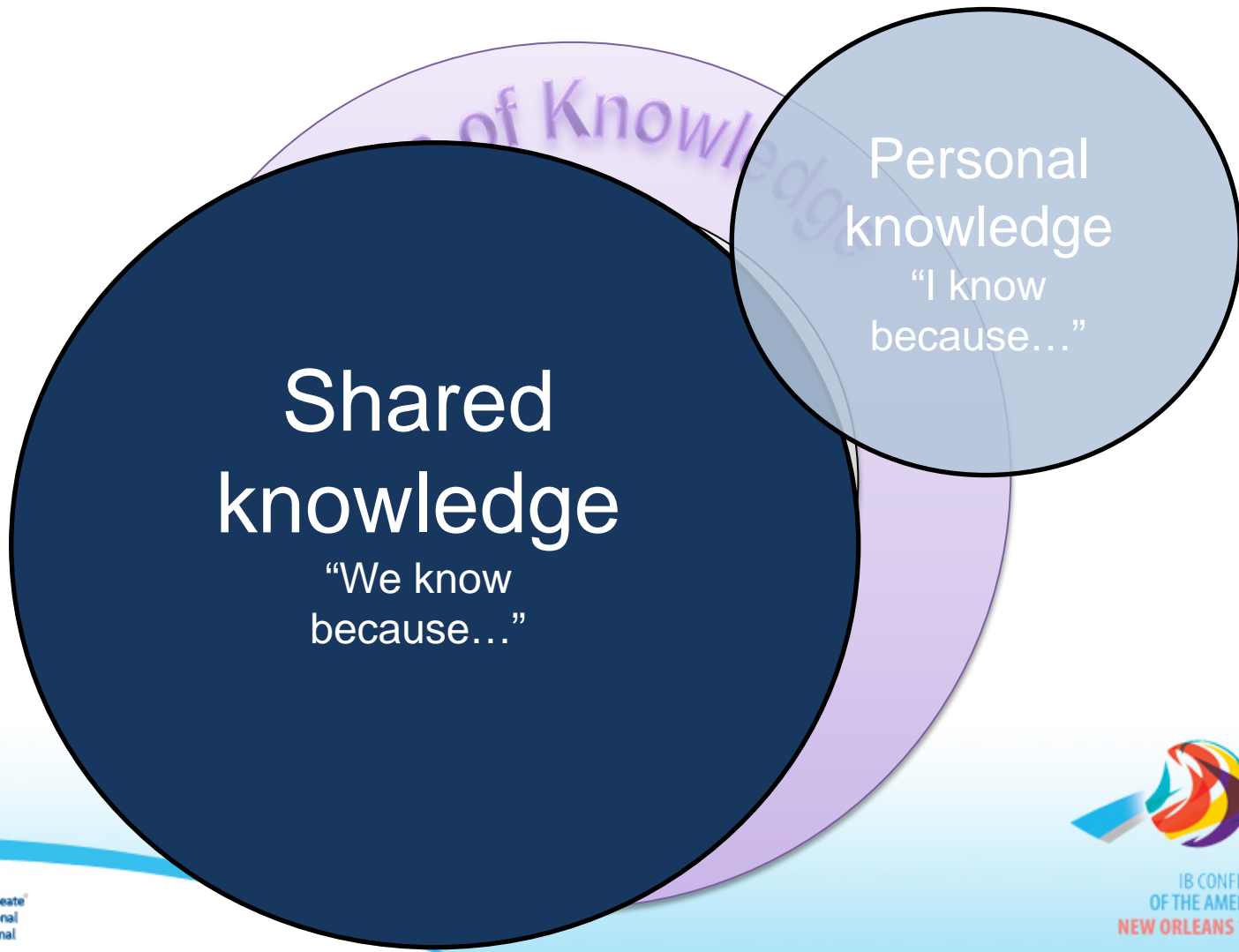
Theory of Knowledge: "What to do About Math"  
English A1 (and other subjects with written IA's): "How to Teach Revision"

[Click Here](#)

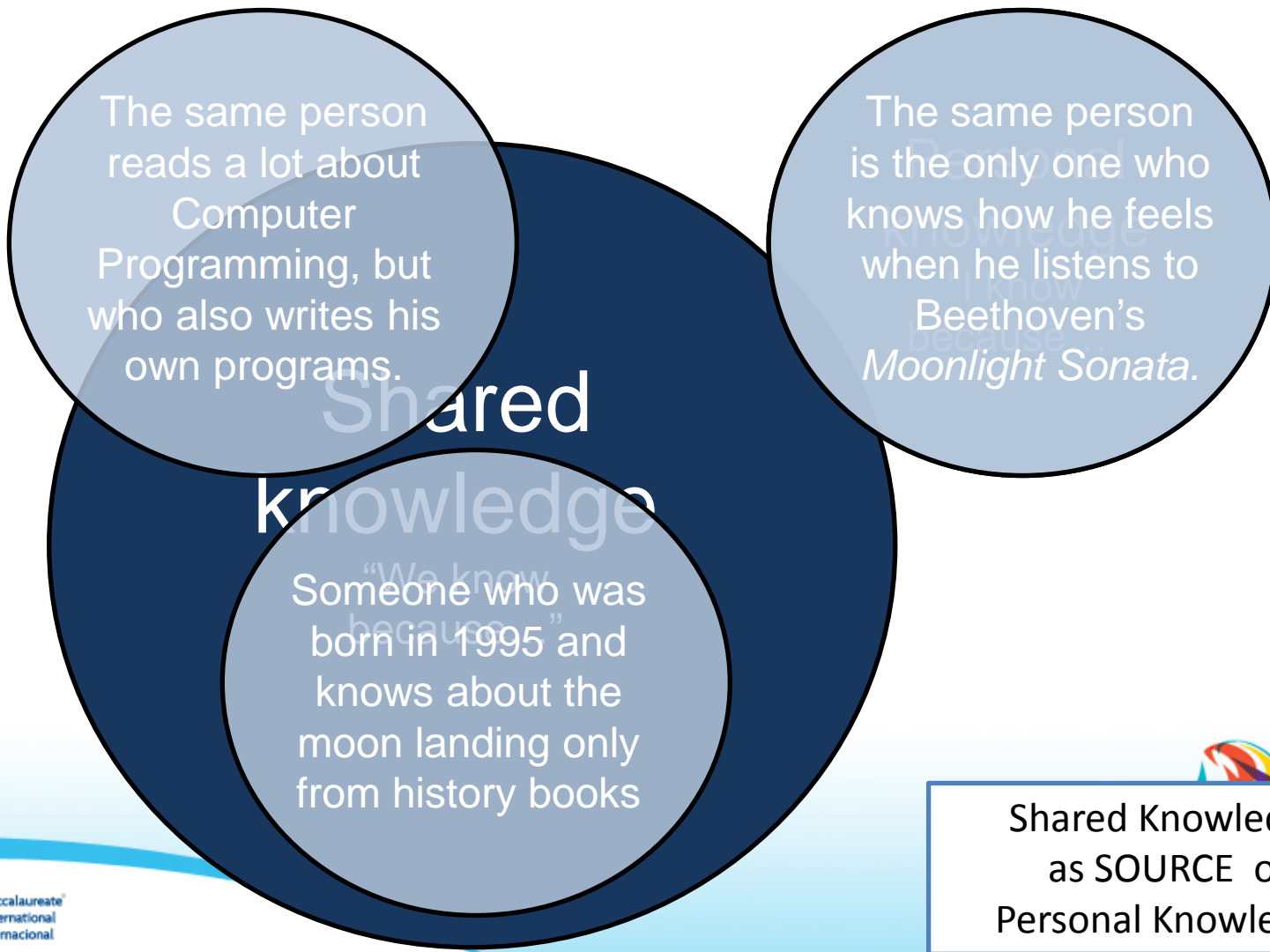
(Image by Kirsty Pargeter. copyright permission from [http://www.123rf.com/photo\\_5246673\\_3d-render-of-a-man-with-ink-well-and-feather-quill.html](http://www.123rf.com/photo_5246673_3d-render-of-a-man-with-ink-well-and-feather-quill.html))



# A New Diagram

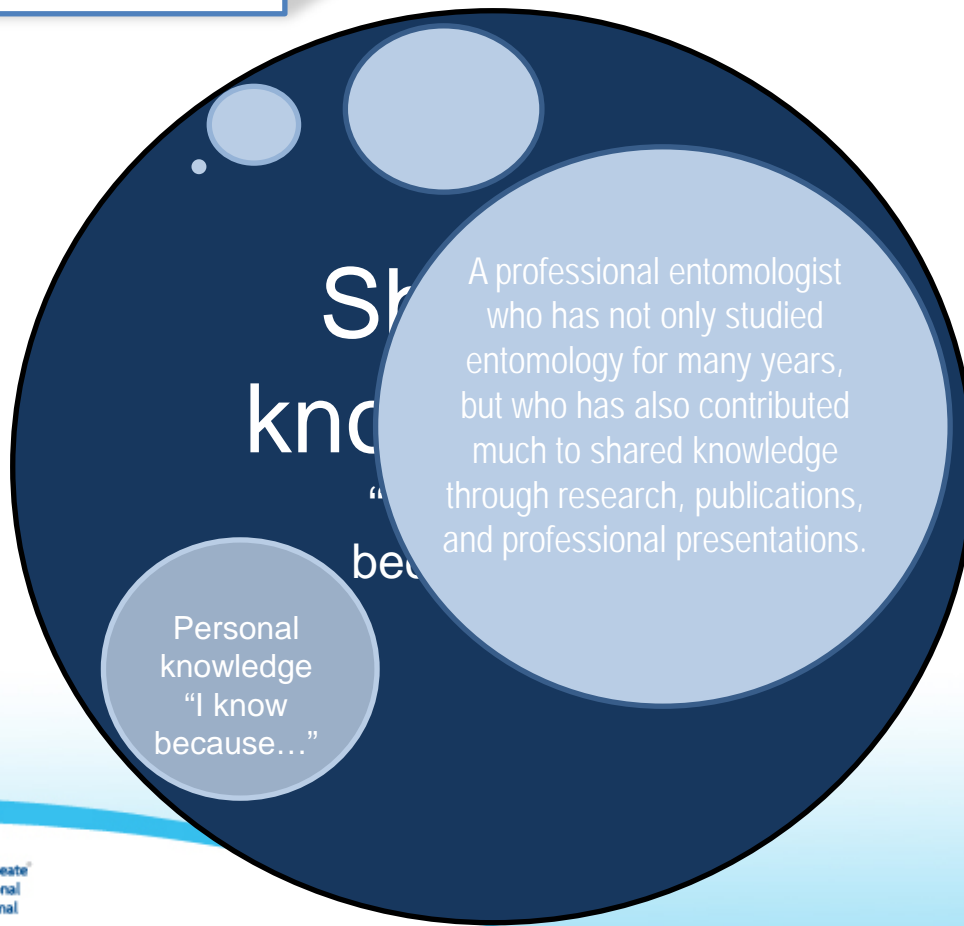


# Considering the Same Knower on Different Parameters



# For Comparing Different Knowers

Illustrating how much of the available shared knowledge there is an individual has learned.



- Someone who has heard of curling, but who has never seen it or played it, who knows no one who plays it, and who doesn't read about it.
- Someone who has studied the Mexican Revolution in school, but who has done no further reading or research.
- Someone with a passion for Japanese music, who buys it, listens to it, and reads about it often.

# For Comparing Different Knowers

## Person 3

Professional Entomologist

## Person 1

Only experience with butterflies is from seeing them flying around the yard and reading about them in story books.

## Person 2

University student; taken numerous biology classes, including some introductory courses in Entomology. Sponsors annual NABA count.

## Person 4

Amateur with a passion for lepidoptera. Participates in the annual NABA Butterfly Count; keeps records of sightings; takes photographs; member professional organization.



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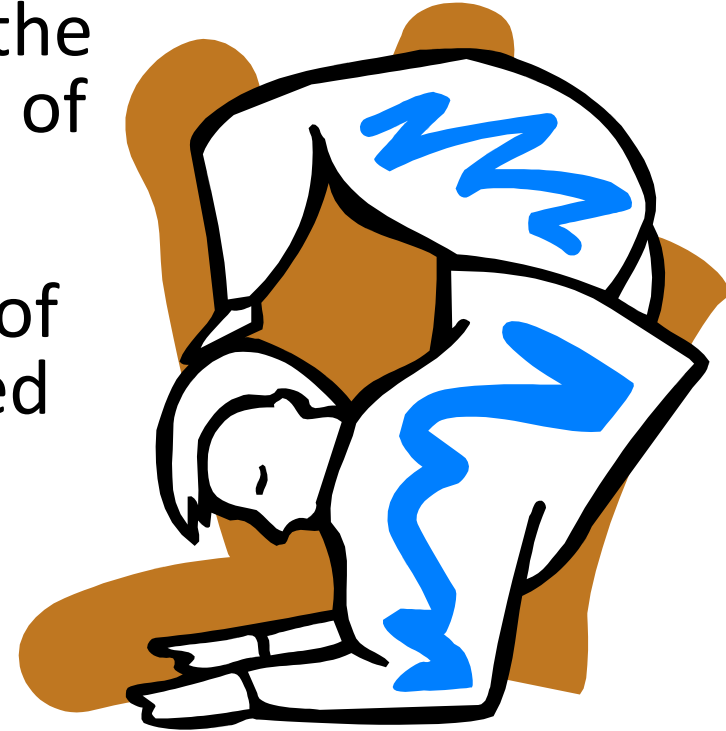


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# Other Possible Uses

- Consider the same knower on the same subject at different times of his or her life
- Consider one knower in terms of his or her contribution to shared knowledge (one subject or compare different subjects)
- Compare multiple knowers in terms of their contributions to shared knowledge



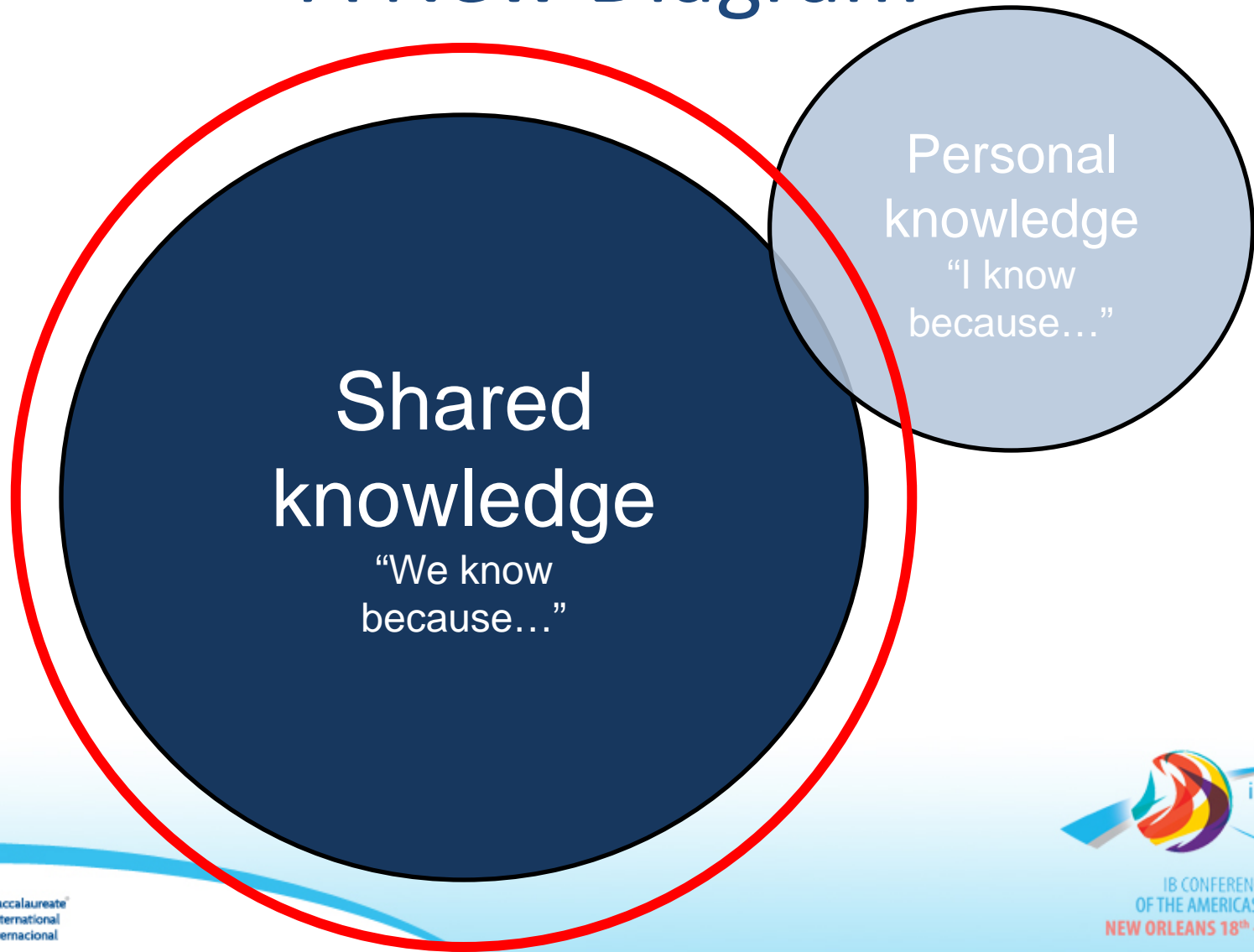
# Where are the WOK?

Ways of Knowing

# Focus on Shared Knowledge



# A New Diagram

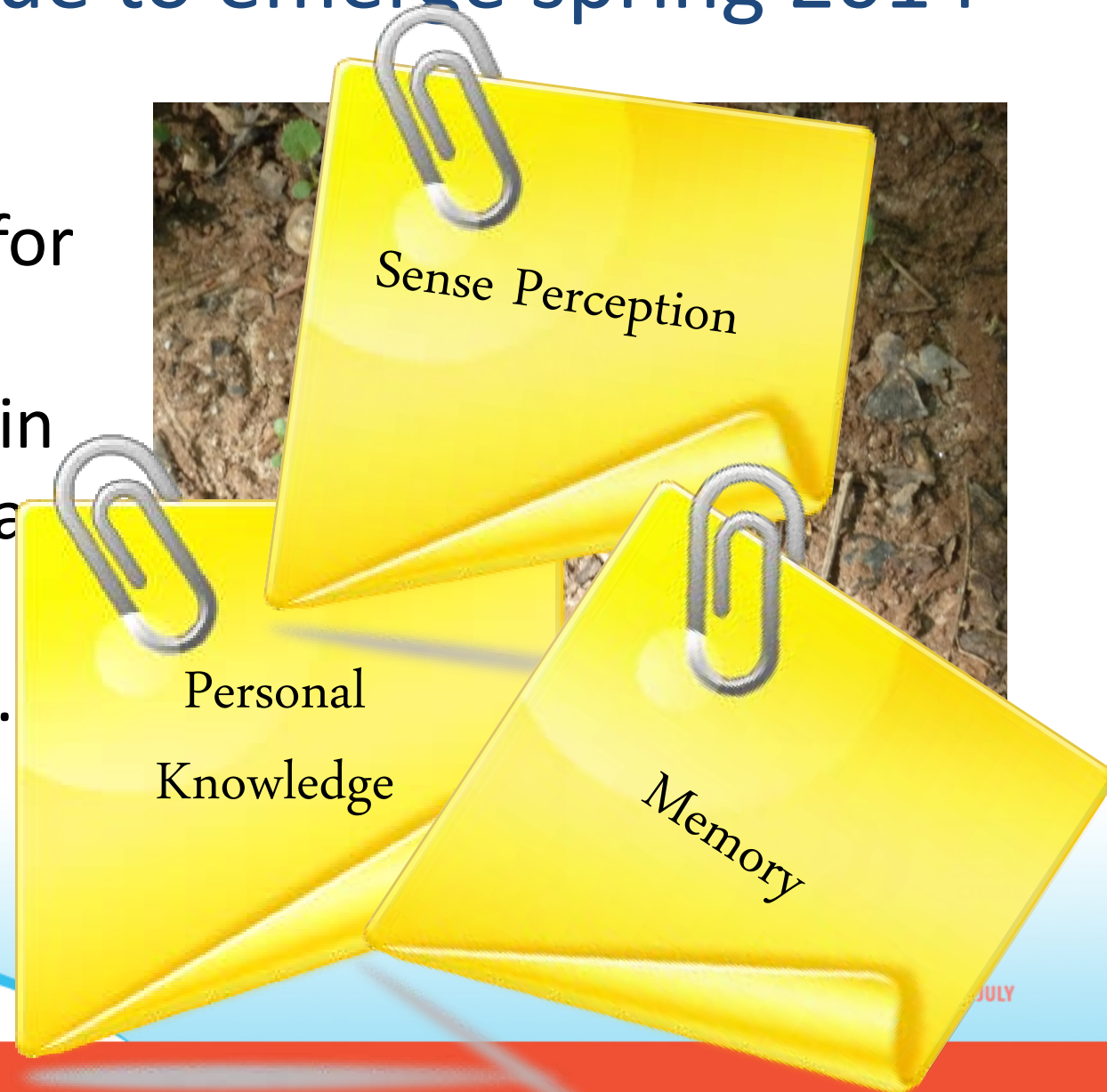


**“What do you know  
about...?”**

The 17-Year Periodical Cicadas

# They were due to emerge spring 2014

- They live underground for 17 years and then emerge in their final instar to become winged adults.



# WRONG!!!

- In March 2013, local newspaper, radio, and television stories started alerting people to the imminent visitation.



# This made me w

- Did some research to find

The image shows a screenshot of the website magicicada.org. The browser address bar displays 'magicicada.org/magicicada\_ii.php'. The website header features a cicada on a leaf and the text 'WWW .'. A navigation menu on the left includes links for Species, Broods, Behavior, F.A.Q., About the project, Geospatial Data, Links, and Contact... Below the menu, there is a section titled 'Cicada Central' with a logo and a map of the United States showing cicada distribution. A scale bar at the bottom right indicates 500 and 1,000 Km. Three yellow sticky notes are overlaid on the page, each with a silver paperclip. The notes contain the text: 'Language', 'Reason', and 'Shared Knowledge'. The note 'Sense Perception' is also present but partially obscured.

Language

Reason

Shared Knowledge

Sense Perception

500 1,000 Km

Cicada Central interactive maps



# Emergence is related to temperature

- 
- 

Personal  
Knowledge

Reason

Sense  
Perception

Imagination

# Emergence is Related to Temperature

- Verified from scholarly resources.

Language

Reason

Sense  
Perception

Shared  
Knowledge

More is know  
gence. Nymphs  
temperatures c  
temperatures a  
influence soil

26), p  
and sl  
lated t

from each  
cle forms of thre  
Recent work s  
ical cicada intr  
development ra  
e origination of  
al cicadas inclu  
predators, and da  
ological cicadas are four-yea  
times result in switching between

## BACKGROUND

Periodical cicadas of the genus *Cicada* (Cicadidae) have fascinated biologists since they were first mentioned in the scientific literature

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# Apparently, they congregated at night.

- For so many straight days, the clouds had stayed in one place.
- The air was a

Imagination

Emotion  
(Interest & Motivation)

Intuition

Sense  
Perception

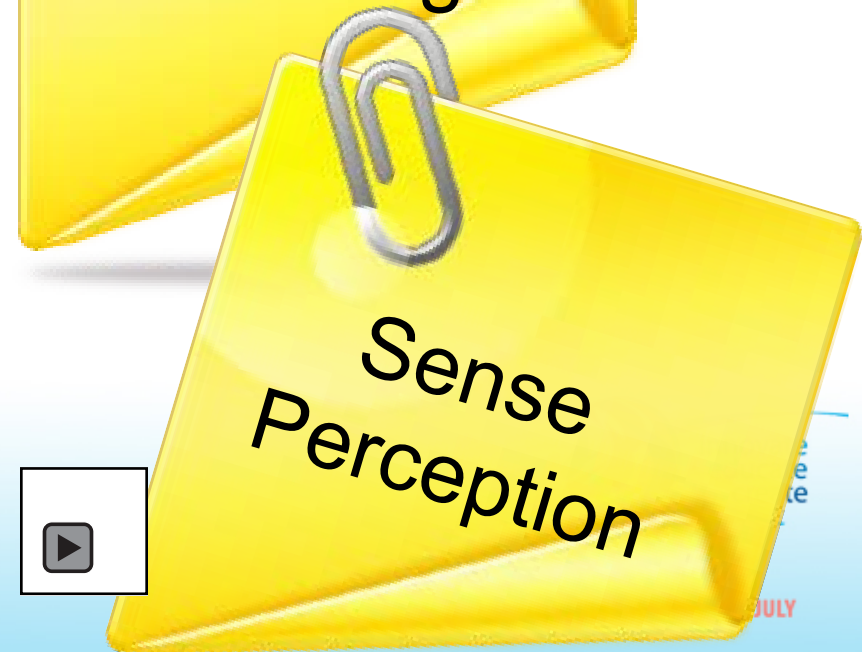
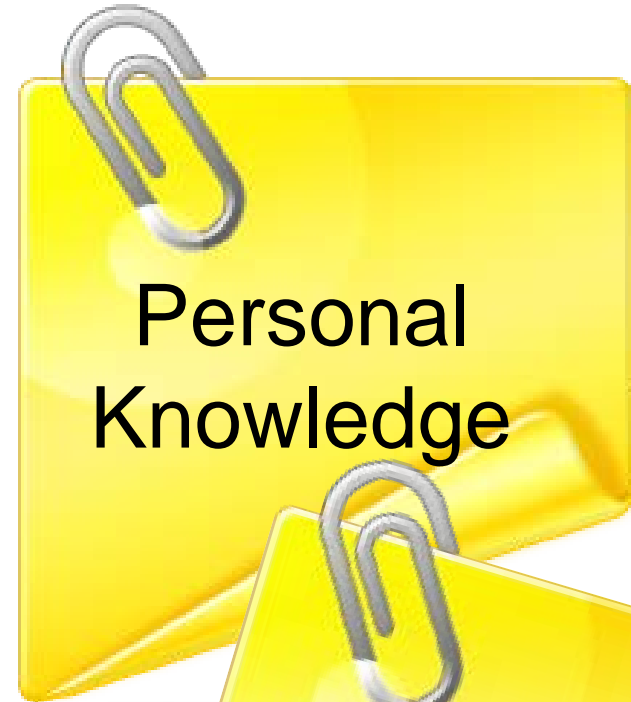
Memory

Personal  
Knowledge

Reason



They make an unbelievable noise!



# A bunch of other stuff about their lifecycle

The image is a collage of three main visual elements:

- Left Panel:** A large, full-height photograph of a tree with numerous brown, seed-like pods hanging from its branches, set against a background of green foliage.
- Right Panel:** A close-up photograph of green leaves with several brown, seed-like pods attached to the branches.
- Bottom Panel:** A screenshot of a Science Friday website article. The article title is "Walk in the Woods: Rediscovering America on the Appalachian Trail" by Bill Bryson. The article text is partially visible, mentioning "and Words", "is, and a camera help kids", "habits, and morphology.", "Honeybees, Image Sounds, and", "and up links to science", "at blow our mind, tickle", "generally strike our ...", "Eat Your Creepy", "er beetles marinated in", "ce? How about some", "it?", "AS", "s than meets the eye.", and "PDF" icon.

At the bottom right of the collage, there is a red banner with the text "Periodical Cicada.pdf" and a PDF icon.

# Features of Knowledge to Notice

- We use multiple ways of knowing all the time.
- A WHOLE bunch of what we know we know because other people tell us and we accept what we're told.
- Some things we think we know are wrong.
- If we're going to rely on what scientists and others tell us, then it's useful to know why we can and should trust them.

# Student Activity



Theory of Knowledge 11  
Carolyn P. Henly  
Henrico High School  
2013-2014

## Knowers and Knowing: Unit 1 Assessment

Note: A copyright fee for the image of the man with a magnifying glass was paid to: [http://www.123rf.com/photo/1292863\\_3d-man-with-a-magnifying-glass.html](http://www.123rf.com/photo/1292863_3d-man-with-a-magnifying-glass.html). This image may not be further used or distributed by other users.

Rationale: Just as a hamburger is the end product of the work of many people and many processes, any piece of knowledge you have is the end product of a long chain of actions and experiences, some of them yours, and some of them other people's. In order to illustrate your understanding of the complex relationships between knowledge and knowledge maker and between knowledge and belief, opinion, or other related concepts that we have investigated during this first unit, you will create a poster, PowerPoint, or other visual image which illustrates the sources and ways of knowing by which you have acquired some of your own knowledge. The object in this investigation is for you to be as truthful and accurate as possible about how YOU personally came to have this knowledge, and for you to demonstrate that you understand the nuances of the ways in which you come to know something.



Directions: Choose one of the topics on the back of this sheet, or a topic of your own (please run that by the teacher just for verification), identify some things you know about that topic (see specifics below), and create a visual aid which illustrates the roots of that knowledge. *A model has been created to help you; refer to it before you begin.* The PowerPoint with the explanation of the hamburger metaphor and the model product will be shown in class on Wednesday and is available on SchoolSpace in the Unit 1 folder.

- Choose one of the topics below. List at least five (and no more than ten) things you know about each topic.
- For EACH of those things that you know
  - identify the source (is this your personal finding? Or did you learn it from someone else? Is it a combination of both?) AND
  - identify all of the ways of knowing that you used in order to develop this particular knowledge.
- You will give a short (5-minute) oral presentation of your visual in which you will choose three of your knowledge claims to present to the class.
- Write a culminating paragraph in which you evaluate the quality of your knowledge. Do you think that you know a lot about this subject? Is your knowledge well-founded? Why or why not



Unit 1 Assessment--the Knowledge Hamburger.pdf

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# Indigenous knowledge systems

## **Australian Aboriginal knowledge: an Area of Knowledge**

- The Aboriginal people of Australia are part of the oldest continuous living culture in human history. Aboriginal people have a rich culture involving a custom, lore and value system based on the sustainability of their spiritual connection, belonging, obligation and responsibility to care for their land, their people and their environment.

<http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09782factsheet1.pdf>

# Mapping Australian Aboriginal Knowledge to the Knowledge Framework

## Scope/applications

Andrews (2006) describes Aboriginal knowledge as:

*accumulated knowledge which encompasses spiritual relationships, relationships with the natural environment and the sustainable use of natural resources, and relationships between people, which are reflected in language, narratives, social organisation, values, beliefs, and cultural laws and customs.*

## Concepts/language

Two fundamental concepts of Australian Aboriginal knowledge are ***the Dreamtime*** and ***Dreaming***. The dreamtime refers to the time of the creation of all things including animals, plants, rocks and other forms of the land that we know today. The dreaming refers to an individual's or group's beliefs.

- <http://www.youtube.com/watch?v=pCuuRRrfOXo>

## Methodology

Michie (1999) writes that Australian Aboriginal knowledge, like all indigenous knowledge systems is based on a worldview of knowledge, which is a set of presuppositions upon which conceptions of reality are grounded. An indigenous perspective on knowledge is based on values and a holistic approach.

Concept: Landforms	Australian Indigenous knowledge	Western scientific knowledge
Explanation	Results from the spiritual events of the dreamtime. For example, the actions of the Rainbow Serpent travelling across the land	Results from erosion. The effects of wind, the movement of water in rain and rivers and heating from the sun
Evidence	Stories, songs and dance	Observations, theories, predictions and experimental confirmation

# A Knowledge Question

If the indigenous worldview of knowledge does not place primacy on reason does it follow that the knowledge claims it produces cannot be verified?



## Historical development

The indigenous cultures of Australia are oldest living cultural history in the world going back at least 50,000 years and some argue close to 65,000 years. Unlike many other areas of knowledge, traditional indigenous knowledge is considered sacred and is not subject to change and is maintained through stories, legends, rituals and laws

## Links to personal knowledge

An important vehicle in moving from personal to shared knowledge in Aboriginal culture is the use of art. It can be used to tell the story of the dreamtime or explain an individual's dreaming or describe historical events. Aboriginal art includes rock carvings, tree-bark paintings and more recently canvass paintings. Aboriginal artists use symbols to tell their stories.



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# Q & A

# References

- **Andrews G, Daylight C, Hunt J. et al 2006, *Aboriginal cultural heritage landscape mapping of coastal NSW*, prepared for the Comprehensive Coastal Assessment by the NSW Department of Natural Resources, Sydney, NSW.**
- **What is aboriginal cultural knowledge? Fact sheet 1, NSW government.**

- Michie M, Where are Indigenous peoples and their knowledge in the reforming of learning, curriculum and pedagogy, paper presented at the fifth UNESCO-ACEID International Conference.

# The End



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