

## Exploring the cycle of Inquiry

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- An online workshop with Kath Murdoch
- [www.kathmurdoch.com.au](http://www.kathmurdoch.com.au)
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## We are inquiring into...



- **What** the inquiry cycle is and its place within a broader inquiry culture and framework.
- **How** the cycle can help us design for deep learning through inquiry
- How can an inquiry cycle help us reframe the way we think about 'summative **assessment**' ?

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## Getting ready to learn...

- What might you need to DO to help you learn?
- What might you need to be?

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Take a moment...how can *you* draw on your “learning assets” to get the most out of our time together?

As a mindful self manager	As a resourceful researcher	As a careful communicator	As a compassionate collaborator	As a thorough thinker
Be <b>focused</b> and present	Ask <b>questions</b>	Offer <b>ideas</b> and suggestions through the chat and when invited	<b>Help</b> others with tech issues	<b>Connect</b> to what you know
Take <b>risks</b> and challenge yourself	Be <b>curious</b>	<b>Listen</b> carefully to what others have to say	Take on <b>responsibilities</b> in a small group	Think <b>ahead</b> (how might I use this?)
Stay <b>positive</b> even when there are setbacks	<b>Record</b> information to refer to later	<b>Respect</b> the ideas of others	Be <b>empathic</b>	<b>Reflect</b> on your practice

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If the goal of **deep learning** is to be attained, we must find ways to tackle the twin problems of 'too much content' and too much telling.' (McTighe and Silver 2020:2)

Inquiry as an approach to teaching : the pedagogy	Inquiry as an approach to planning/designing
Approaches to teaching that invite learners to be curious, question, investigate, make connections, transfer and continuously reflect.	Authentic, concept based, emergent and integrative

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## Inquiry is...

is an approach that consciously positions the learner an **active participant in a process of investigation**. Questions, both teacher and learner initiated, help drive the learning.

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Inquiry ...

emphasises the **construction of conceptual understandings** together with the development of core, **generic competencies and dispositions.**

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Inquiry is

a **'stance'** that sees child as competent, capable learner, adult as skilful facilitator and co-researcher, curriculum as fluid and contestable.

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# THE “CYCLE OF INQUIRY” IS ONE PART OF A BIGGER PICTURE.

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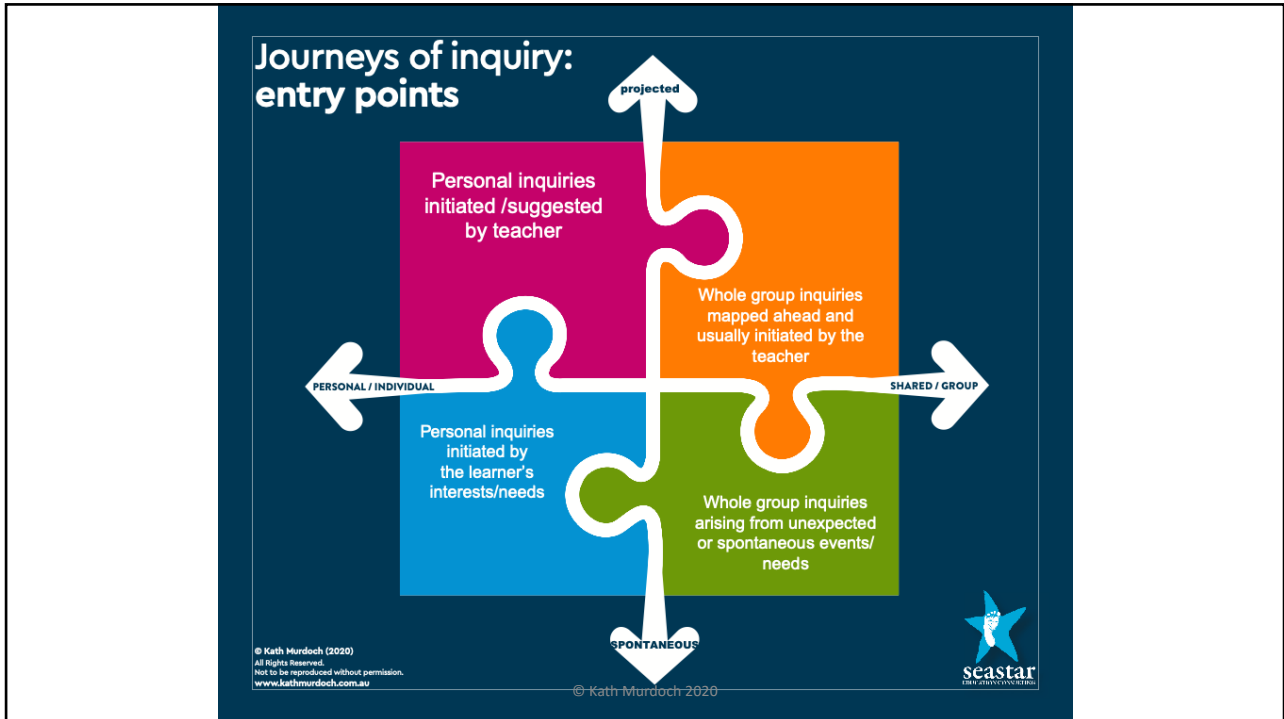
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•A piece of the pie...



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Use a concept-based approach

Seek cross curriculum connections

Have a big picture in mind and allow the journey to unfold

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## Aim for authenticity:

-primary sources, real audiences, real issues and problems, Hands on materials and experiences

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- Plan with colleagues
- Invite learners to contribute to the planning
- Collaborate with experts beyond the school

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Build in opportunities for learners to 'go further' with their interests and questions

Familiarise them with the process so they can design their own inquiries

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## Moving from 'topics' to concept based inquiries

Anzac day	Why and how do we commemorate events in the past?
Explorers	How does <b>exploration</b> change people and places?
Plants	What do <b>living things</b> need to <b>grow</b> and <b>survive</b> ?
Seasons	How does where we live (our <b>location</b> ) affect HOW we live ( <b>lifestyle</b> ) ?

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## Behind every great journey of inquiry...

- Is a group of teachers who have given careful thought to the **conceptual understandings, skills and dispositions the inquiry is targeting.**
- Is a group of teachers willing to **plan responsively** and let go of a desire to have the whole thing mapped out week by week. They know and **trust** the themselves, the kids and the process. They are willing to wait, watch and listen.
- Is a group of teachers who **know their curriculum** and can see the connections with the inquiry

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## Framing the (shared) inquiry

Compelling question/s	Understandings	Targetted Assets	Curriculum (Aus)
<p>Why and how do living things adapt?</p> <p>Why is adaptation so important?</p> <p>Change Impact</p>	<p>To <b>survive</b> in the <b>environments</b> in which they live, plants and animals (including humans) develop both behavioural and structural <b>adaptations</b>.</p> <p><b>Design</b> and <b>creativity</b> can help humans find ways to adapt to rapid <b>change</b>.</p> <p>When <b>change</b> is rapid or unexpected, some living things are unable to adapt which, in turn, <b>impacts</b> on <b>survival</b>.</p>	<p>As <b>researchers</b>, how can we effectively gather and record information from photographs, videos and direct observation?</p> <p>As <b>collaborators</b>, how can we give and receive constructive, effective feedback</p>	<p>Science Biological Science Scientific endeavour</p> <p>Design Technologies</p> <p>Humanities Civics and Citizenship (taking responsibility) Geography (diverse environments)</p> <p>Capabilities: Ethical thinking</p>

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2020	FOUNDATION	YEAR 1&2	YEAR 3&4	YEAR 5&6
<b>Term 1</b>	<b>HOW CAN WE LEARN WELL &amp; PLAY WITH OTHERS?</b> HEALTH CAPABILITIES <i>Personal &amp; Social Learning, Intercultural (diversity in the classroom)</i> Creative & Critical Thinking	<b>HOW CAN WE CARE FOR OURSELVES AS WE GROW &amp; CHANGE?</b> BIOLOGICAL SCIENCE HEALTH MATHEMATICS CAPABILITIES <i>Personal &amp; Social Learning, Creative &amp; Critical Thinking</i>	<b>HOW DO WE DECIDE? WHAT'S THE IMPACT OF OUR DECISIONS?</b> HEALTH CAPABILITIES <i>Personal &amp; Social Learning, Creative &amp; Critical Thinking</i>	<b>HOW CAN I FIND/USE MY POWER?</b> HEALTH CAPABILITIES <i>Personal &amp; Social Learning, Ethical &amp; Intercultural (beliefs - actions)</i> Creative & Critical Thinking
<b>Term 2</b>	<b>HOW DO WE CONNECT TO PLACES? HOW CAN WE KEEP OURSELVES SAFE &amp; HEALTHY?</b> HEALTH GEOGRAPHY HISTORY CAPABILITIES <i>Personal &amp; Social Learning (Teamwork/sharing)</i> Creative & Critical Thinking	<b>HOW &amp; WHY DO WE OBSERVE &amp; RECORD CHANGE?</b> SCIENCE HISTORY MATHS CAPABILITIES <i>Creative &amp; Critical Thinking, Personal &amp; Social Learning, Intercultural &amp; Ethical Understandings</i>	<b>WHY ARE ANIMALS SO IMPORTANT IN OUR WORLD?</b> BIOLOGICAL SCIENCE CIVICS & CITIZENSHIP (laws - animal protection) GEOGRAPHY (location) CAPABILITIES <i>Personal &amp; Social Learning (Design Teams)</i> Ethical (values, impact, action) Intercultural (respect for other cultures) Critical & Creative (what if...)	<b>WHO'S GOT THE POWER &amp; HOW IS IT USED?</b> CIVICS & CITIZENSHIP ECONOMICS MATHS HISTORY CAPABILITIES <i>Ethical &amp; Intercultural</i> Creative & Critical Thinking
<b>Term 3</b>	<b>HOW DOES IT WORK? CAN I MAKE IT?</b> DESIGN TECHNOLOGIES PHYSICAL SCIENCE CAPABILITIES <i>Personal &amp; Social Learning, Ethical Understandings</i> Creative & Critical Thinking	<b>WHAT CAN WE LEARN FROM THE PAST?</b> HISTORY CAPABILITIES <i>Creative &amp; Critical Thinking, Intercultural</i> Ethical Understandings	<b>SHOULD WE BUILD IT JUST BECAUSE WE CAN?</b> DESIGN TECHNOLOGIES (engineering sustainability) CIVICS & CITIZENSHIP GEOGRAPHY (structures around the world) SCIENCE (chemical & physical) MATHS (location) CAPABILITIES <i>Personal &amp; Social (teamwork)</i> Ethical Understandings	<b>HOW DOES WHERE WE LIVE IMPACT OUR POWER?</b> DESIGN: <i>Film Festival</i> GEOGRAPHY DESIGN TECHNOLOGIES, DIGITAL TECHNOLOGIES ENGLISH - Persuasive MUSIC, ARTS CAPABILITIES <i>Creative &amp; Critical Thinking</i> Ethical Understandings
<b>Term 4</b>	<b>HOW ARE WE CONNECTED TO ALL LIVING THINGS?</b> BIOLOGICAL SCIENCE GEOGRAPHY DESIGN TECHNOLOGIES CAPABILITIES <i>Personal &amp; Social Learning, Ethical Understandings</i> Creative & Critical Thinking	<b>HOW DO LIGHT &amp; SOUND AFFECT OUR EVERYDAY LIVES?</b> PHYSICAL SCIENCE DIGITAL & DESIGN TECHNOLOGIES MATHEMATICS CAPABILITIES <i>Personal &amp; Social Learning (Design Teams)</i> Creative & Critical Thinking	<b>HOW DO WE EXPLORE? HOW DOES EXPLORATION IMPACT ON PEOPLE &amp; PLACES... PAST &amp; PRESENT?</b> HISTORY GEOGRAPHY MATHS (time, sequencing) CAPABILITIES <i>Ethical &amp; Intercultural Understandings, Creative &amp; Critical Thinking</i>	<b>HOW DO WE POWER OUR LIVES/THE PLANET?</b> PHYSICAL SCIENCE DESIGN TECHNOLOGIES HISTORY GEOGRAPHY CAPABILITIES <i>Ethical Understandings</i> Creative & Critical Thinking

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## An intuitive process

- Human beings are inquirers. When we have a problem, challenge, desire or need to find out – **we are curious and investigative by nature!** The process we use as we journey through an inquiry in the classroom reflects, in many ways, a process many of us use intuitively.

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Generally speaking....

We have a **REASON** to inquire!

We **take stock** of the known - we have theories about how we think it might work

We **gather** new information (in different ways)

We filter, **evaluate**, critique...re-think

We express and share ....and we ask new **questions**,

We **reflect** and redirect our efforts

We **act/share/produce**...

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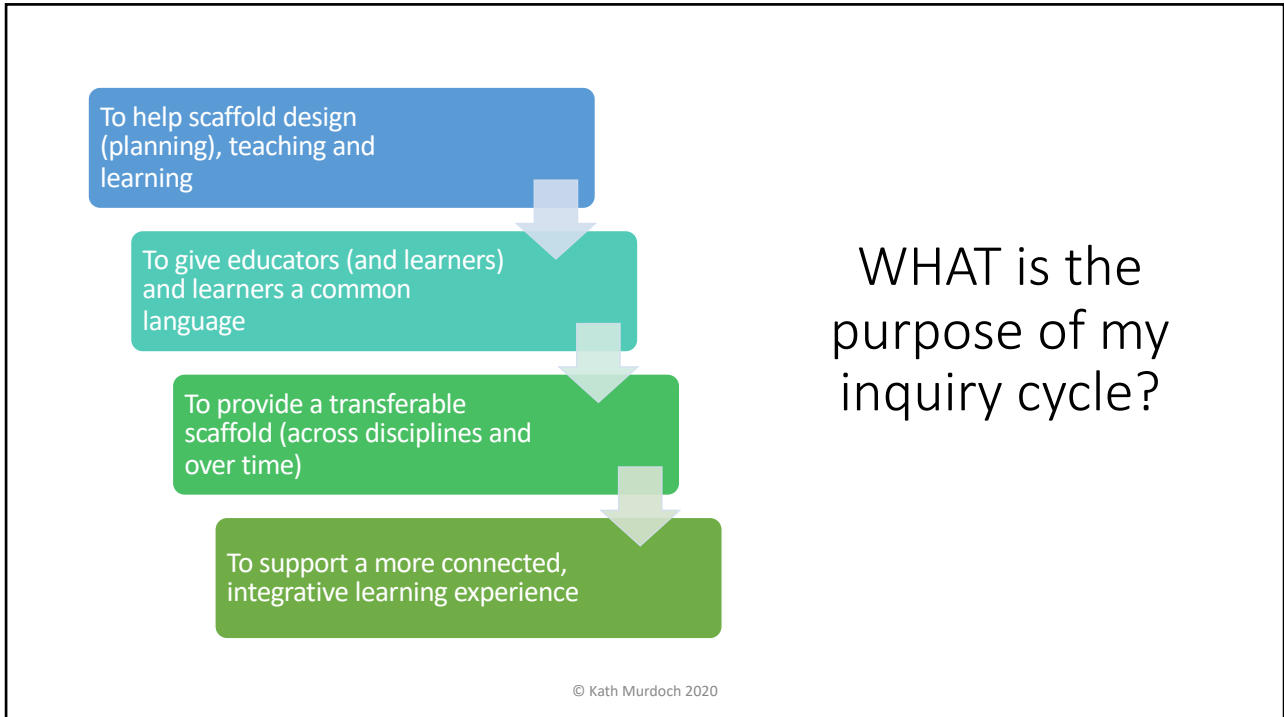
### A MODEL FOR DESIGNING A JOURNEY OF INQUIRY



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## Find out

- Use a range of resources & methods to gather information (read, view, interview, survey, experiment, observe)
- Critically assess the value of the information gathered
- Document along the way.
- Refine/generate more questions

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## SORTING OUT INFORMATION GATHERED FROM EXCURSION TO THE WETLANDS

(EPS PRIMARY)

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## Sorting out through documentation

As we **observe and guide** children through a journey of inquiry, we invite texts IN to the process and we encourage the creation of texts.

One powerful text (to express and inform) is the **documentation of the process itself... (written, drawn, photographed, recorded...)**

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## Reflect and act

- Consider ways to apply/use/share learning to make a difference (So what?)
- Make connections back to big ideas – now what do we understand?
- Evaluate the process
- Consider unanswered questions
- What next? What now?

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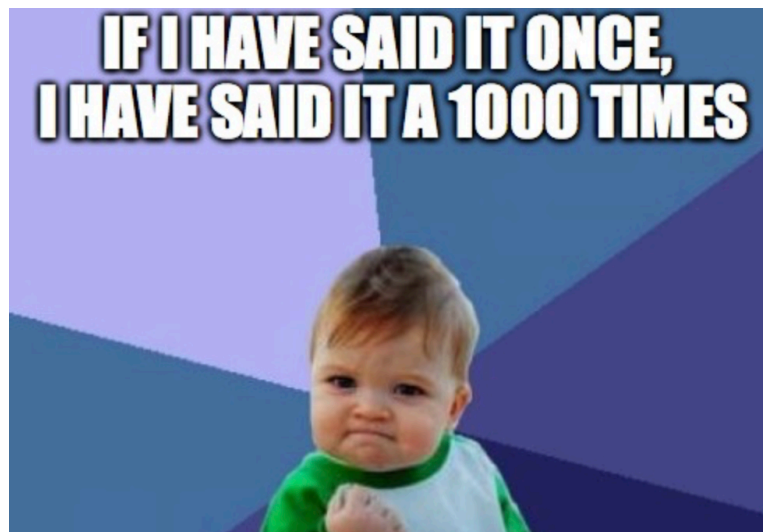
**BUSTING  
MYTHS**

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The big one...  
'Inquiry is a  
subject'

- Nope.
- It's an approach to designing, teaching and learning

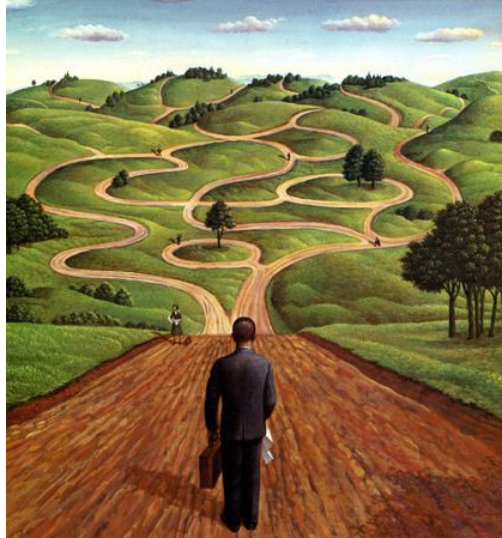


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Myth #1 - This is a step by step, linear process

- NOPE...
- It's messy and recursive but it DOES move forward. The path is a winding one.



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Myth #2 Each step of the process is separate from the rest.

- Nope.
- The phases blur. I can be 'finding out' while I am hearing someone else's theories during tuning in!
- Finding out and sorting out often interweave



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# Myth 3: A 'cycle' makes it too formulaic. Learners should be free to inquire in a way that suits them

- Nope (well mostly nope)
- It only becomes a formula **if you let it!** Show kids how flexible the cycle is. Help them see it as a framework not a recipe



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#4 If we use a cycle of inquiry, we are 'doing inquiry'

- Nope
- This is one slice of the inquiry pie... and won't really be effective without the other elements



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# 5 The cycle of inquiry is for extended 'units'

- Nope.
- In essence, the process can apply to short and spontaneous inquiries too

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#6 The Inquiry cycle is for planning purposes

- Nope.
- Well yes...but it is also for TEACHING and learning purposes!
- Making it visible and part of the classroom discourse helps learners grow to use it more intuitively.

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*Thank you for exploring the cycle of Inquiry with me!*

email me at [kath@kathmurdoch.com.au](mailto:kath@kathmurdoch.com.au) (and sign up for the newsletter while you are there...)

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