if?

Investigating Framework

Developing students' skills for investigating, discovering, researching, problem solving and critical thinking.

Spectrum of Students' Autonomy when Investigating

	Prescribed Investigating A ⟶ B Highly structured directions and modelling from educator prompt investigating, when students…	**Bounded Investigating** A ▧ B Boundaries set by and limited directions from educator channel investigating, when students…	**Scaffolded Investigating** A ⊞ ? Scaffolds placed by educator shape independent investigating, when students…	**Open-ended Investigating** ? — ? Students initiate the investigation and this is guided by the educator to…	**Unbounded Investigating** ??? Students determine the guidelines for the investigation that are in accord with discipline or context to …
Embark & Clarify *What is my purpose?* Ask questions, define problems, set aim or decide on purpose, heeding ethical, cultural, social and team (ECST) considerations. *Curious*					
Find & Generate *What information do I need?* Find and generate needed information/data using appropriate methodology. *Determined*					
Evaluate & Reflect *How trustworthy are my information, data and processes?* Determine credibility of sources, information & data generated. Reflect on processes used. *Discerning*					
Organise & Manage *How will I organize & what will I manage?* Organise information and data to reveal patterns and themes, and manage teams and research processes. *Harmonising*					
Analyse & Synthesise *What does it mean?* Analyse information/data critically and synthesise new knowledge to produce coherent individual/team understandings. *Creative*					
Communicate & Apply *What communication aids my investigation? What is important for each audience?* Discuss and write processes, respond to feedback, and present ethically understandings and applications. *Constructive*					

Facets of Discovery

Subject knowledge from teachers to students.

What is the connection between the knowledge you direct students to and the Discovery Learning that you facilitate? Discovery learning skills are well developed in content-rich contents.

Students…

Students:
Watch
Listen
View
Absorb
Copy
Recite
Follow
Look
Write-down
Take-down
Imitate
Mimic
Replicate

Will this knowledge be memorised by students, repeated in instruction or provided on paper or in a weblink?

If memorised by students, when is the optimum time and process for this learning?

How well and for how long will this knowledge be retained?

What content knowledge will help, and what content knowledge will hinder, students' active cognitive and affective engagement with discovery?

ACE is often dependent on subject knowledge input and or interactions on processes. Less so in Kindergarten where learning by playing may havecertain limits, such as fences, equipment set out but children often work open ended

More so when have knowledge and processes are vitl to achieve any substantial outcome eg Year 10 genetics.

UCE	Prescribed	Bounded	Scaffolded	Open-ended	Unbounded
	Direct instruction				
				Discovery Learning	
	POGIL				
	TBL				
		IBL, CBL, PBL, etc nebulous terms			
A Culture of Inquiry					

Unkown is not bad, esp if gives way soon to ACE and so in knowable by educators.