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(Draft 12 Feb, 2016)

Discovery Learning Skills



A framework for facilitating the explicit, coherent, incremental and cyclic development of the skills associated with discovering, researching, problem solving, critical thinking and clinical reasoning.

Spectrum of Students' Autonomy when Discovering

		Prescribed Discovering	Bounded Discovering	Scaffolded Discovering	Open-ended Discovering	Unbounded Discovering
<p>Discipline content knowledge from educators to students.</p> <p>← 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 contexts. →</p>		Highly structured directions and modelling from educator prompt investigation, in which students...	Boundaries set by and limited directions from educator channel investigation, in which students...	Scaffolds placed by educator shape independent investigation, in which students...	Students initiate the investigation and this is guided by the educator to...	Students determined guidelines for the investigation that are in accord with discipline or context to ...
<p>Students...</p>						
<p>Facets of Discovery</p>	<p>Embark & Clarify <i>What is my purpose?</i> Ask questions, define problems, set aim or decide on purpose, heeding ethical, cultural, social and team (ECST) considerations.</p> <p>Curious</p>					
	<p>Find & Generate <i>What information do I need?</i> Find and generate needed information/data using appropriate methodology.</p> <p>Determined</p>					
	<p>Evaluate & Reflect <i>How trustworthy are my information, data and processes?</i> Determine the credibility of selected sources, information and data generated. Reflect on the processes used.</p> <p>Discerning</p>					
	<p>Organise & Manage <i>How will I organize & what will I manage?</i> Organise information and data to reveal patterns and themes, and manage teams and research processes.</p> <p>Harmonising</p>					
	<p>Analyse & Synthesise <i>What does it mean?</i> Analyse information/data critically and synthesise new knowledge to produce coherent individual/team understandings.</p> <p>Creative</p>					
	<p>Communicate & Apply <i>What communication aids my investigation? What is important for each audience?</i> Discuss and write processes, respond to feedback, and present ethically understandings and applications.</p> <p>Constructive</p>					
<p>Students: Watch Listen View Absorb Copy Recite Follow Look Write-down Take-down Imitate Mimic Replicate</p> <p>Will this knowledge be memorised by students, repeated in instruction or provided on paper or in weblink?</p> <p>If memorised by students, when is the optimum time and process for this learning?</p> <p>How well and for how long will this knowledge be retained?</p> <p>What content knowledge will help, and what content knowledge will hinder, students' active cognitive and affective engagement with discovery?</p>						