

Overview of STEM - Integrated Design Inquiry – ‘Learning Environments’								
Teaching and Learning Theories/Models/Frameworks					Australian Curriculum (ACARA, 2017)			
J u n c t u r e	GeSTE Windows	Guided Inquiry Design (GID)	Information Search Process	Design Thinking	Yr 6 Science	Yr 5&6 Technologies -Digital -Design	Yr 6 Maths	Level 4 General Capabilities
	*Potential depending on students’ inquiries (Lupton, 2008)	(Kuhlthau, Manitoes & Caspari, 2015)	(Kuhlthau, 2004b)	(Hasso Plattner Institute of Design, 2017)			*Possible content depending on students’ questions	
O n e	Generic Situational	Open	Initiation	Empathize	Nature & development of Science	Investigating  Collaborating & Managing	Data representation & interpretation  *Using units of measurement	Literacy Numeracy Critical and Creative Thinking ICT
		Immerse	Selection					
T w o	Generic Situational	Identify	Formulation	Define	Questioning	Defining	Data representation & interpretation  Reasoning	Literacy Numeracy Critical and Creative Thinking ICT
		Gather	Collection	Ideate	Predicting  Planning & Conducting	Collaborating & Managing  Generating & Designing		
T h r e e	Situational Transformative Expressive*	Create	Collection	Empathize Define Ideate Prototype	Planning & Conducting  Processing & Analysing	Producing & Implementing  Evaluating	Data representation & interpretation  Problem solving	Literacy Numeracy Critical and Creative Thinking ICT
F o u r	Transformative* Expressive*	Share	Presentation	Test	Use & influence of Science	Evaluating	Reasoning	Literacy Critical and Creative Thinking ICT
		Evaluate	Assessment		Evaluating  Communicating			

Overview of STEM-Integrated Design Inquiry. Lotte ten Hacken, 2017.