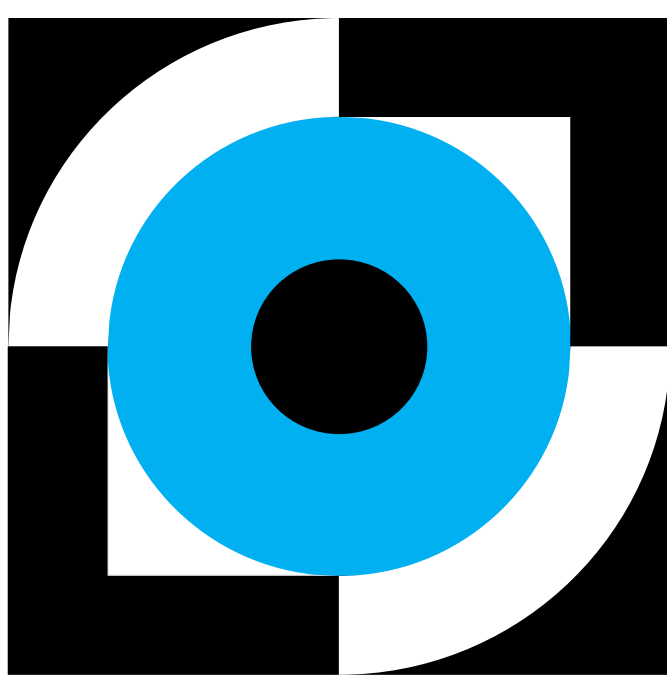


BIG LITTLE THINKING



What is Big Little Thinking (BLT)?

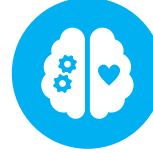
Big Little Thinking (BLT) is a powerful framework for leaders, teachers, and learners to inspire critical, creative, and consilient thinking through wild and wicked problems.

Contemporary educators face challenges and opportunities in a global milieu that is recognised for the scale and complexity of its social, ecological, and technological problems. BLT facilitates teaching and learning through situated problems with a way of thinking that can recognise and reconcile tensions or 'opposites' and reveal the possibilities between them.

Situation 	Problem 	Solution 
A situation is any event or occurrence that implies a problem, generally consists of objects, agents, actions connected in and across place and time. A situation is the 'who, what, when, where' of a problem.	A problem is any situation that requires the coordination and creation of parts for a purpose. A problem is usually framed as a statement that identifies something as dysfunctional or missing.	A solution is any coordination, configuration or creation of parts that helps to address a problem. A solution is usually framed as a statement that identifies something as helping, fixing or balancing.

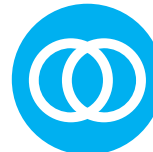
Ways of Big Little Thinking (BLT)

Big Little Thinking (BLT) encourages critical, creative, and consilient thinking through social, technological and ecological problems.

Critical Thinking 	Creative Thinking 	Consilient Thinking 
Critical thinking tests knowledge through analysis and deconstruction.	Creative thinking generates knowledge through novel assemblies and perspectives.	Consilient thinking explores deep connectivity between seemingly separate thoughts.

Units of Big Little Thinking (BLT)

Big Little Thinking (BLT) facilitates thinking through problems that involve truth claims (propositions) about things (entities), types of things (properties), and relationships between things (zygos).

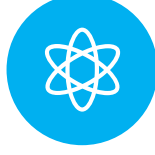
Proposition 	Entity 	Property 	Zygo 
A proposition is a truth claim about an association (e.g. cause, correlation, attribution) between an entity and a property.	An entity is any thing (object, action, or concept) that is the focus of thinking.	A property is a characteristic or attribute that defines a thing.	Zygos are conceptual pairs, dyads, or poles that frame a graduated spectrum, and may be related as both-and-either-or-neither-nor, in between and beyond.

Examples of Zygos

Absence-Presence Finite-Infinite Nothing-Everything Chaos-Order Open-Closed One-Many Volatile-Stable Repel-Attract Macro-Micro Freedom-Control	Centralised-Distributed Compete-Collaborate Hierarchical-Egalitarian Individual-Collective Local-Global Emotion-Cognition Qualitative-Quantitative A priori-A posteriori Profane-Sacred Conserve-Develop	Simple-Complex Mythos-Logos Analytic-Synthetic Empirical-Rational Inner-Outer Concrete-Abstract Nature-Nurture Inductive-Deductive Attack-Defend Produce-Consume	Nature-Culture Past-Future Religious-Secular Traditional-Progressive Expand-Compress Soft-Hard Diverge-Converge Fission-Fusion Isolated-Integrated Masculine-Feminine	Unity-Diversity Add-Subtract Continuous-Discrete Spirit-Matter Mind-Body Self-Other Subjective-Objective Literal-Symbolic Free-Determined Natural-Synthetic
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Dimensions of Big Little Thinking (BLT)

Big Little Thinking (BLT) requires thinking through matter, meaning, and meta-dimensions to make sense and find purpose.

Matter (Left-Right) 	Meaning (Positive-Negative) 	Meta (Everything-Nothing) 
This dimension represents neutral zygos (i.e., tensions) that are relevant to a problem.	Meaning relates to value judgements and interpretations of experiences of matter.	This meta-dimension represents the origin and expansion of all other dimensions.
Time (Past-Future) 	Space (Near-Far) 	Fact (True-False) 
This dimension represents developments and differentiations in time (i.e., chronological and/or structural changes).	Space represents the position and location of material entities.	This dimension represents the ways of knowing that ascribe truth and falsity to descriptions of matter.

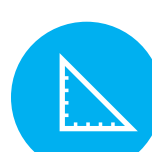
Temporal Dimensions of BLT

BLT encourages explorations of problems through big history and deep time.

Cosmological	Geological	Biological	Anthropological	Historical	Present	Futurological
Related to the origin and development of matter and energy.	Related to the origin and development of the Earth and its elements.	Related to the origin and development of botanical and zoological life.	Related to the origin and development of humans.	Related to the origin and development of cultures and civilisations.	Related to current events relative to the scope and scale of time.	Related to anticipated and speculated futures.

Domains of Big Little Thinking (BLT)

Big Little Thinking (BLT) through problems requires contexts with boundaries (scope), means of measurement (scale), degrees of importance (significance), and nature of inquiry (field).

Scope (Big-Little) 	Scale (Micro-Macro) 	Significance (More-Less) 	Field (Art-Science) 
This aspect refers to the extent, breadth, range or spread of a domain. The big picture expands the domain of a problem. The little picture reduces the domain.	This aspect represents the level of differentiation, detail, or resolution used to measure or observe a domain. It reminds us that thinking is always 'by degree'.	This aspect represents the relevance or value of a thing observed within a domain. It reminds us that different levels of importance may be ascribed to the 'same' thing.	This aspect represents the nature of inquiry that defines the domain. It reminds us that problems and solutions can be viewed differently through disciplinary lenses.

Development of Big Little Thinking (BLT)

Big Little Thinking (BLT) frames the development of thinking as the increasing ability to recognise and relate entities. Each 'way' has a naïve and recapitulated form, such that all 'ways' have value and be understood in transpositions.

Niladic (Zero) 	Monadic (One) 	Dyadic (Two) 	Triadic (Three) 	Polyadic (Multiplicity) 	Enigmatic (Mystery) 
Thinking that is more absent or negating.	Thinking that is more singular or holistic.	Thinking that is more binary or dualising.	Thinking that is more middling or synthesising.	Thinking that is more random or differentiated.	Thinking that is more absurd or paradoxical.

Transpositional
(0, 1, 2, 3 . . . ∞, ?)

Process for BLT

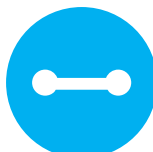
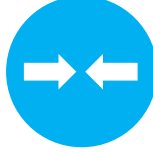
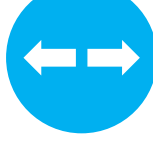
BLT provides an adaptable process that can be used in simple or complex ways to apply the framework to real-world problems.

NAME the PROBLEM 	FRAME the PROBLEM 	TAME the PROBLEM 
 1. Initiate: Choose a topic and select a problem	 Investigate: Use the BLW to explore the units, dimensions, domains, dynamics, and developments of the problem.	 4. Ideate: Imagine possible solutions
 2. Populate: Share knowledge, experiences and opinions of the problem	 3.1. Circle the Problem	 6. Actuate: Implement a solution
	 3.2. Square the Problem	 7. Evaluate: Review and evaluate the solution
	 3.3. Centre the Problem	 5. Create: Create a practicable solution
		 8. Iterate or Disrupt: Repeat the process, change the process, or reconceptualise the problem

Further Information: The Big Little Thinking (BLT) framework and its artefact - The Big Little Window (BLW) - were designed by Dr Raoul Adam with support of colleagues from the Worldviews, Attitudes & Values Study (WAVES) group in the Faculty of Education at Southern Cross University; the Cairns Institute at James Cook University; and the School of History, Philosophy, Religion and Classics at the University of Queensland.

Dynamics of Big Little Thinking (BLT)

Big Little Thinking (BLT) identifies many different dynamics that help to explain actions and beliefs that are central to a problem. Dynamics describe actions and relationships within and between the dimensions of BLT.

General 	Stability: A period of consistent identification with one position.
Formative Experiences: Experiences that influence individual or group identity.	Enantiodromia: The paradoxical tendency for the pursuit of a position to reinforce or take on the form of its opposite position.
Positively Reinforcement: Rewarding experiences that strengthen a position.	Heterodyning: The combination of developmental stages without transition between stages or differentiation between stages.
Negatively Reinforcement: Punitive experiences that weaken a position.	Relativistic Disorientation: The experience of an absurd and debilitating relativism and onto-epistemological immobilisation.
Contextualising: Locating the most immediate and salient aspects of a problem.	Zygoic Reflexivity: Awareness of zygoic relationships that influences those relationships.
Development: Transition from one stage or way of relating positions, to another.	Consolidation: The reinforcement of an existing position.
Transpositioning: Fluid but deliberate movement between positions that are relational and contextual.	
Combining (Convergent) 	Synthesising: Generating new or intermediary concepts from the combination of opposing parts.
Depolarisation: Movement from exclusive commitment to a particular dyadic constituent (i.e. pole).	Unifying: Expressing the full integration of parts.
Negation: The mutual extinction of equally opposing parts.	Relational: Pertaining to the interdependence of parts.
Ubiquitisation: The sense of profound inter-connectedness with other dyads or dynamics across domains of knowledge.	Interpenetration: The sophisticated expansion of one zygoic constituent to accommodate most of the reality of its 'opposite'.
Immirration: The recognition of aspects of a position in an opposing position.	Consilience: The convergence of perspectives, disciplines, or fields through the realisation of a common or shared reality.
Entanglement (Interdependence): Realisation that one dyadic constituent cannot be changed without a related change in the other dyadic constituent.	
Separating (Divergent) 	Inversion: A shift of polarity that moves from the opposed to the accepted.
Revolution: A relatively rapid and violent change of position.	Repulsion: Leaving a position with little attraction from without.
Volatility: A state of extreme tension that precedes position change or conflict.	Expulsion: Forcing out of a position by fellow adherents of a position.
Polarisation: Increasing oppositional separation between zygoic elements.	Reclusion: Avoidance of a different position without experience of that position.
Similflict: Conflict between similar entities competing for the same space.	Translating: A gradual movement from one position to another.
Recapitulation: Development towards a new form of a prior position.	Masking: A negative position disguised as positive position, or a positive position disguised as a negative position.
Retreat: Return to a position after a negative experience with a different position.	Counterbalancing: Identification with an equally valent counter-position to rectify a perceived imbalance.
Retributive Attraction: Movement to a new position to reject a past position.	Binary Opposition: Representation of conflict as two mutually exclusive positions without contiguity or relationality, where one is privileged over another.
Binary Middling: Adoption of a middle position without recognition of contiguity, contextuality or interdependence with poles (Middle Extremism).	

Types of Zygos

Zygo	A conceptual pair with a contiguous and interdependent relationship (e.g. Active-Passive)	Domain General Form	A form of zygo that is easily recognisable across domains (e.g. Bitter-Sweet, Discrete-Continuous)
Proto	Zygos that originate or permeate most other zygos (e.g. One-Many; Everything-Nothing; More-Less)	Domain Specific Form	A form of zygo that tends to be used in a specific domain (e.g. Acidic-Alkaline, Digital-Analogue)
Primary	A pair that is unable to be divided into further zygos (e.g. Order-Chaos, Open-Closed)	Neutral	A zygo that is worded in a way that tends not to privilege either element (e.g. Open-Closed)
Secondary	A pair that consists of more than one zygo (e.g. Science-Art, Masculine-Feminine)	Biased	A zygo that is worded in a way that distorts or values one element over another (e.g. Open-Closeded)
Isomorphic	A pair whose elements are directly related (e.g. Hot-Cold, Hard-Soft, Low-High)	Proto Descriptive	The zygo that expresses ultimate neutral forms (e.g. Left-Right)
Orthomorphic	A pair whose elements are indirectly related (e.g. Quality-Quantity, Rational-Emotional)	Proto Evaluative	The zygo that expresses ultimate valency (Good-Evil)
Triadic	A zygo with a specific connecting element (e.g. Black-Grey-White; Past-Present-Future)	Symbolic	A contextualised pair that is used to express deeper structural zygos (e.g. Cats-Dogs, Fire-Ice, Sugar-Spice).

The Big Little Window (BLW)

Big Little Thinking (BLT) uses artefacts and models to apply the framework and facilitate thinking through problems and solutions. There are numerous ways to represent the framework, however, BLT's main artefact is known as the Big Little Window (BLW).

The BLW consists of a circle, square, and centre to represent the three core dimensions of the framework, and facilitate application of BLT's units, domains, dynamics, developments, and process. These spatial metaphors can be framed as actions to apply the BLT framework to a problem.

Circle the Problem

(Matter Dimension – Left-Right)

To *Circle the Problem* is to identify and investigate the most significant tensions (i.e. dyads, poles, or zygos) that are relevant to the content of a problem.

Measurement (0° to 360°): Zygos are represented by complementary degrees (e.g. 0-180) on the outer circle, where there is general affinity between constituents to the left (90-0-270) and the right (90-180-270).

Square the Problem

(Meaning Dimension – Positive-Negative)

To *Square the Problem* is to represent and explore the values of the matter that give it meaning.

Measurement (3L to 3R; +3 to -3): A single zygo is represented in its most neutral form along the horizontal axis (left-right), with its value-laden forms represented along the vertical axis (positive-negative).

Centre the Problem

(Meta Dimension - Everything-Nothing)

To *Centre the Problem* is to explore ultimate questions (i.e. Cosmological, Epistemological, Ontological, Axiological, Teleological) that make sense of more contextual positions on matter and meaning.

Measurement (? to ∞): The concentric circles and squares represent movement back to questions of origins and more foundational forms, and forward to questions of ends and more differentiated forms.

