What is Big Little Thinking (BLT)?

Big Little Thinking (BLT) is a powerful framework that facilitates critical, creative, and consilient thinking and teaching about everything and nothing. 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



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.

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.

Solution

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.



and deconstruction.



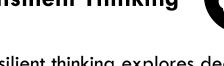
Critical thinking tests knowledge through analysis

Creative Thinking



Creative thinking generates knowledge through novel assemblies and perspectives.

Consilient Thinking (\$ ♥)



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).

property.



Entity



concept) that is the focus of thinking.

An entity is any thing (object, action, or

A property is a characteristic or

attribute that defines a thing.

and beyond

Zygos are conceptual pairs, dyads, or poles that frame a graduated spectrum, and may be related as bothand-either-or-neither-nor, in between

Examples of Zygos

A proposition is a truth claim about an

attribution) between an entity and a

association (e.g. cause, correlation,

Absence-Presence Finite-Infinite Nothing-Everything Chaos-Order Open-Closed One-Many Volatile-Stable Repel-Attract Macro-Micro

Compete-Collaborate Individual-Collective Local-Global **Emotion-Cognition** A priori-A posteriori Profane-Sacred Freedom-Control Conserve-Develop

Centralised-Distributed Hierarchical-Egalitarian Qualitative-Quantitative Mythos-Logos Inner-Outer Nature-Nurture Attack-Defend

Simple-Complex **Analytic-Synthetic Empirical-Rational** Concrete-Abstract Inductive-Deductive Produce-Consume

Nature-Culture Past-Future Religious-Secular Traditional-Progressive **Expand-Compress** Soft-Hard Diverge-Converge Fission-Fusion Isolated-Integrated Masculine-Feminine

Meta

Unity-Diversity Add-Subtract Continuous-Discrete Spirit-Matter Mind-Body Self-Other Subjective-Objective Literal-Symbolic Free-Determined Natural-Synthetic

Dimensions of Big Little Thinking (BLT)

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

(Left-Right)

Matter



This dimension represents neutral zygos (i.e., tensions) that are relevant to a problem.

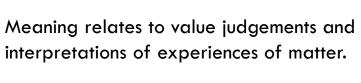
Time (Past-Future)

Cosmological



This dimension represents developments and differentiations in time (i.e., chronological and-or structural changes).

(Positive-Negative)



Space (Near-Far)

Meaning



Space represents the position and location of material

Fact (True-False)

expansion of all other dimensions.

(Everything-Nothing)



This dimension represents the ways of knowing that ascribe truth and falsity to descriptions of matter.

This meta-dimension represents the origin and

Temporal Dimensions of BLT

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

Related to the origin and development of matter and energy.

Related to the origin and development of the Earth and its elements.

Geological

Related to the origin and development of botanical and zoological life.

Biological

Anthropological Related to the origin and development of humans.

Historical Related to the origin and development of cultures and civilisations.

Futurological Present Related to current Related to events relative to the anticipated and speculated futures. scope and scale of

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

domain.

(Big-Little)



This aspect refers to the extent, breadth,

range or spread of a domain. The big

problem. The little picture reduces the

picture expands the domain of a

Scale

degree'.

(Micro-Macro)

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

(More-Less) 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.

Field

(Art-Science) 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

Thinking that is more

absent or negating.



Monadic (One)

Thinking that is more

singular or holistic.

Dyadic

Thinking that is more

binary or dualising.

Triadic (Three)

Thinking that is more

Polyadic (Multiplicity)

Enigmatic (Mystery)

FRAME the PROBLEM

Thinking that is more Thinking that is more absurd or paradoxical.

middling or synthesising. random or differentiated. **Transpositional** $(0, 1, 2, 3 \ldots \infty, ?)$

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.

Enantiodromia: The paradoxical tendency for the pursuit of a position to reinforce or take on the form of its opposite position.

Heterodyning: The combination of developmental stages without transition between

stages or differentiation between stages. **Relativistic Disorientation:** The experience of an absurd and debilitating relativism

and onto-epistemological immobilisation. **Zygotic Reflexivity:** Awareness of zygoic relationships that influences those

Consolidation: The reinforcement of an existing position.

Combining (Convergent)

relational and contextual.

Depolarisation: Movement from exclusive commitment to a particular dyadic constituent (i.e. pole).

Formative Experiences: Experiences that influence individual or group identity.

Contextualising: Locating the most immediate and salient aspects of a problem.

Development: Transition from one stage or way of relating positions, to another.

Transpositioning: Fluid but deliberate movement between positions that are

Positively Reinforcement: Rewarding experiences that strengthen a position.

Negatively Reinforcement: Punitive experiences that weaken a position.

Dynamics of Big Little Thinking (BLT)

Negation: The mutual extinction of equally opposing parts.

Ubiquitisation: The sense of profound inter-connectedness with other dyads or dynamics across domains of knowledge.

Immirroration: The recognition of aspects of a position in an opposing position.

Entanglement (Interdependence): Realisation that one dyadic constituent cannot be

changed without a related change in the other dyadic constituent.

Separating (Divergent)

Revolution: A relatively rapid and violent change of position.

Volatility: A state of extreme tension that precedes position change or conflict. **Polarisation:** Increasing oppositional separation between zygotic elements.

Similflict: Conflict between similar entities competing for the same space. **Recapitulation:** Development towards a new form of a prior position.

Retributive Attraction: Movement to a new position to reject a past position.

Binary Middling: Adoption of a middle position without recognition of contiguity,

Synthesising: Generating new or intermediary concepts from the combination of opposing parts.

Unifying: Expressing the full integration of parts.

Relational: Pertaining to the interdependence of parts.

Interpenetration: The sophisticated expansion of one zygoic constituent to

accommodate most of the reality of its 'opposite'.

Consilience: The convergence of perspectives, disciplines, or fields through the realisation of a common or shared reality.

Retreat: Return to a position after a negative experience with a different position.

Inversion: A shift of polarity that moves from the opposed to the accepted.

Repulsion: Leaving a position with little attraction from without.

Expulsion: Forcing out of a position by fellow adherents of a position.

Transitioning: A gradual movement from one position to another.

Reclusion: Avoidance of a different position without experience of that position.

Masking: A negative position disquised as positive position, or a positive position disguised as a negative position.

perceived imbalance.

Counterbalancing: Identification with an equally valent counter-position to rectify a

Binary Opposition: Representation of conflict as two mutually exclusive positions

contextuality or interdependence with poles (Middle Extremism) without contiguity or relationality, where one is privileged over another

Form

Symbolic

Types of Zygos

Primary

Secondary

Isomorphic

Triadic

Orthomorphic

Zygo A conceptual pair with a contiguous and interdependent relationship (e.g. Active-Passive) Proto Zygos that originate or permeate most other zygos (e.g. One-Many; Everything-Nothing; More-Less)

> A pair that is unable to be divided into further zygos (e.g. Order-Chaos, Open-Closed)

A pair that consists of more than one zygo (e.g. Science-Art,

A pair whose elements are indirectly related (e.g. Quality-

A zygo with a specific connecting element (e.g. Black-Grey-

Masculine-Feminine) A pair whose elements are directly related (e.g. Hot-Cold, Hard-Soft, Low-High)

A form of zygo that is easily recognisable across domains (e.g. **Domain General** Form Bitter-Sweet, Discrete-Continuous)

A form of zygo that tends to be used in a specific domain (e.g. Domain Specific Acidic-Alkaline, Digital-Analogue)

Neutral A zygo that is worded in a way that tends not to privilege either element (e.g. Open-Closed) Biased A zygo that is worded in a way that distorts or values one

element over another (e.g. Open-Closeted)

The zygo that expresses ultimate neutral forms (e.g. Left-Right) **Proto Evaluative** The zygo that expresses ultimate valency (Good-Evil)

> A contextualised pair that is used to express deeper structural zygos (e.g. Cats-Dogs, Fire-Ice, Sugar-Spice).

The Big Little Window (BLW)

Quantity, Rational-Emotional)

White: Past-Present-Future)

Big Little Thinking (BLT) uses artefacts and models to apply the framework and facilitate thinking through problems and solutions. There are numerous

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



ways to represent the framework, however, BLT's main artefact is known as the Big Little Window (BLW).

(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

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

Square the Problem

(Meaning Dimension – Positive-Negative)

left (90-0-270) and the right (90-180-270).

relevant to the content of a problem.

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).

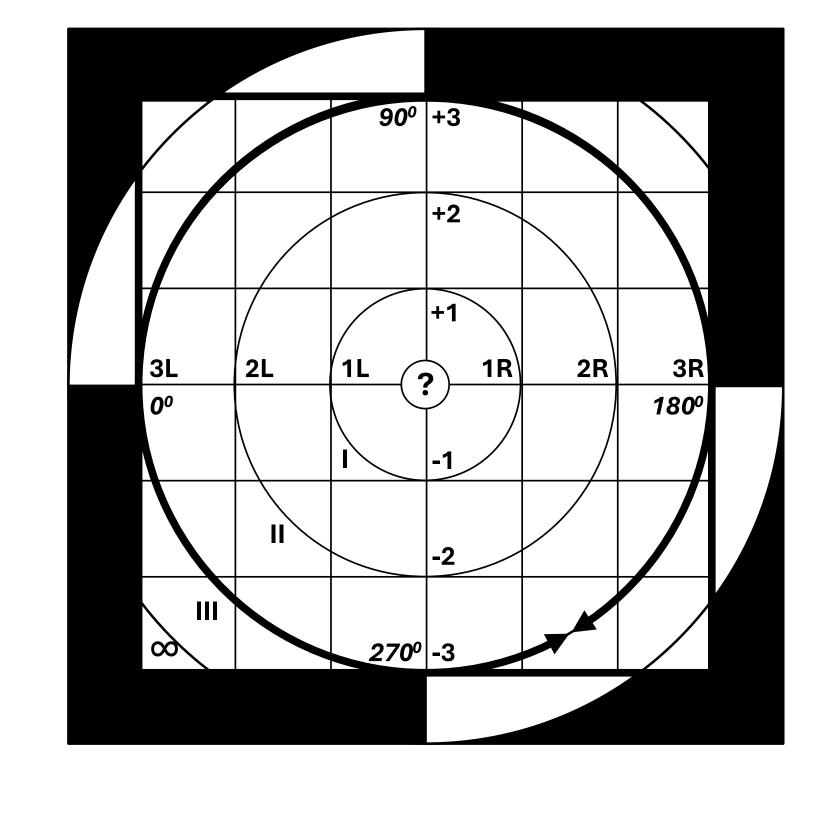
Centre the Problem

on matter and meaning.

(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

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.



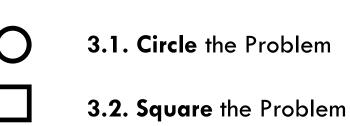
Process for BLT

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

Initiate: Choose a topic and select a problem

NAME the PROBLEM (X)

Investigate: Use the BLW to explore the units, dimensions, domains, dynamics, and developments of the



5. Create: Create a practicable solution

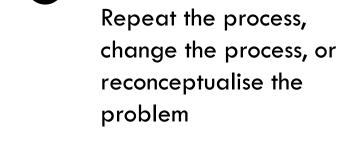
4. Ideate: Imagine possible



SOLVE the PROBLEM (

6. Actuate: Implement a

evaluate the solution



8. Iterate or Disrupt:

2. Populate: Share knowledge, experiences and opinions of the problem

problem.

3.3. Centre the Problem