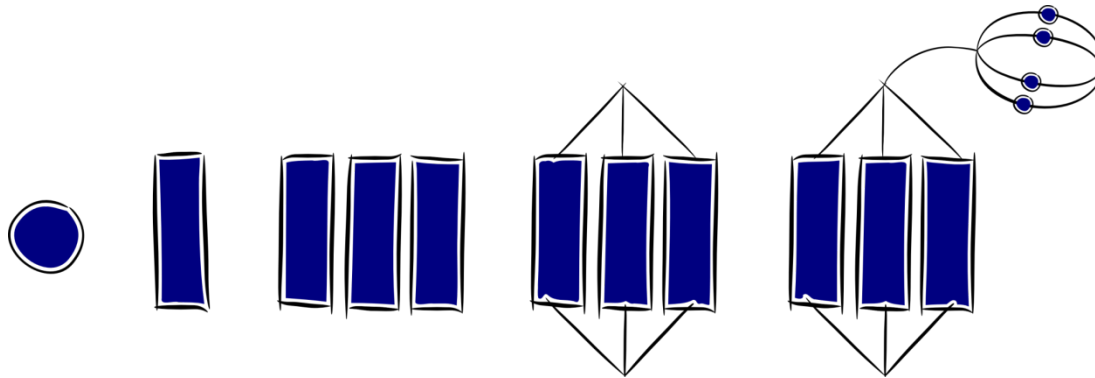


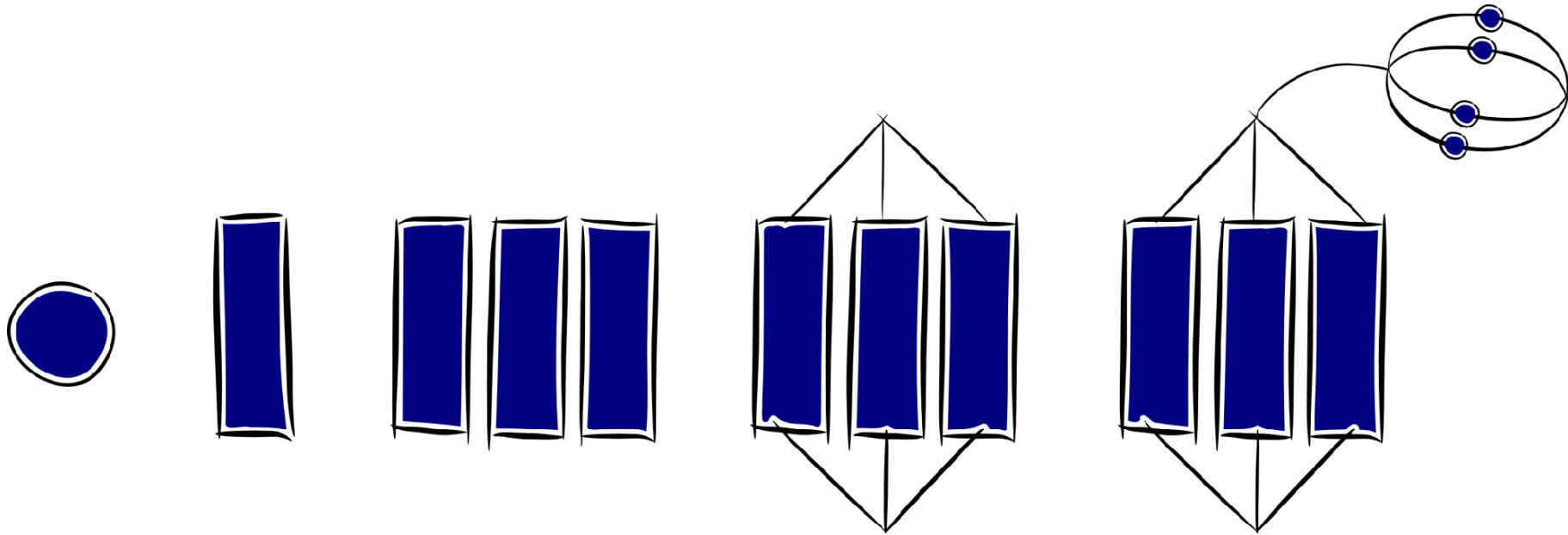
SOLO Taxonomy and Success Criteria for Learning Logs.



Pam Hook
www.pamhook.com

SOLO Taxonomy - Biggs and Collis 1982

Structure of the Observed Learning Outcome



Prestructural

Unistructural

Multistructural

Relational

Extended abstract



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Biggs, J.B., and Collis, K.F. (1982) Evaluating the Quality of Learning-the SOLO Taxonomy (1st ed) New York: Academic Press.

#1. Identify the Learning Intention (LI).

[verb] [content] [context]

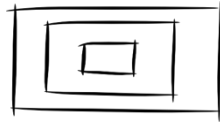
Use SOLO and constructive alignment to design learning intention/s that describe what students are to understand from an Achievement Objective or Achievement Standard.








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#3. Identify Success Criteria for the Effective Strategy

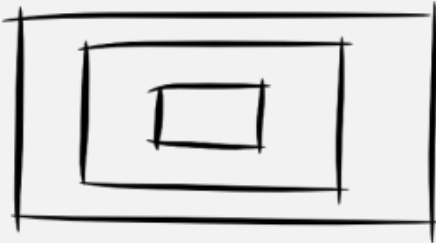
Success Criteria - [HOT SOLO Map Rubrics]








		
		
		
		
		

#4. Create a SOLO Learning Log Self-assessment and/or Peer Assessment

Effective Strategy:



Success
Criteria:

SOLO Learning Log:

**My *statement* is at a
[insert SOLO level]
outcome because**

.....

My next step is to

.....

Examples

LI: [**define**] [content] [context]

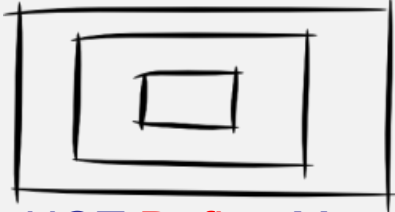
LI: **Define** the geosphere on the Planet Earth.

LI: **Define** Pythagoras' Theorem in two and three dimensions.

LI: **Define** the rights of consumers in NZ society.

LI: **Define** artwork from a Maori cultural context.

Effective Strategy:



HOT Define Map

SOLO Learning Log:

My definition statement is at a [insert SOLO level] outcome because

.....

My next step is to






.....



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Success Criteria for **DEFINE**

	My definition has several relevant ideas about X, links these ideas and looks at them in a new way.
	<i>My definition has several relevant ideas about X and links these ideas.</i>
	My definition has several relevant ideas about X.
	My definition has one relevant idea about X.
	<i>I need help to define X.</i>

LI: [describe] [content] [context]

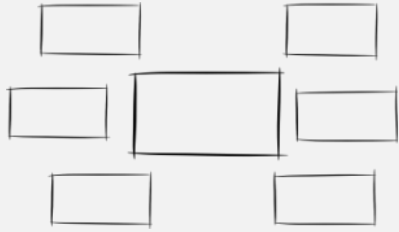
LI: **Describe** the continental crust of the geosphere.

LI: **Describe** the gradient of a line making an angle of 40° with the x-axis.

LI: **Describe** consumption in early 20th century New Zealand

LI: **Describe** the use of colour in an identified artwork by Robin Kahukiwa

Effective Strategy:



HOT Describe Map

SOLO Learning Log:

My **description** is at a [insert SOLO level] outcome because






.....

My next step is to

.....



Success Criteria for **DESCRIBE**

	<i>My description has several relevant attributes or characteristics, explains why and looks at it in a new way.</i>
	<i>My description has several relevant attributes or characteristics and explains why.</i>
	<i>My description has several relevant attributes or characteristics.</i>
	<i>My description has one relevant attribute or characteristic.</i>
	<i>I need help to describe X.</i>

LI: [sequence] [content] [context]

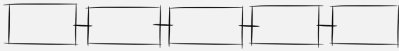
LI: **Sequence** the distribution of heat energy around Planet Earth

LI: **Sequence** the steps needed to rearrange a line equation to the form $y=mx + c$

LI: **Sequence** the steps in setting up a limited liability company

LI: **Sequence** the preparation of Harakeke for Raranga (weaving, textile and fibre arts).

Effective Strategy:



HOT **Sequence** Map

SOLO Learning Log:

My **sequencing** statement is at a [insert SOLO level] outcome because

My next step is to



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Success Criteria for **SEQUENCE**

	<i>I can order the stages, explain why and look at the sequence in a new way.</i>
	<i>I can order the stages and explain why.</i>
	<i>I can order the stages.</i>
	<i>I can identify the order of one of the stages.</i>
	<i>I know the stages but I need help to sequence them.</i>

LI: [**classify**] [content] [context]

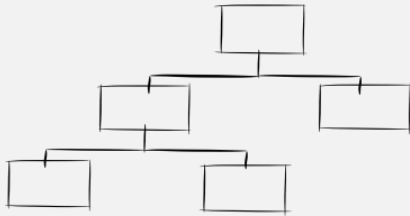
LI: **Classify** convergent plate boundaries by the plates involved.

LI: **Classify** straight line equations ($ax + by + c = 0$).

LI: **Classify** the way firms compete in the market

LI: **Classify** design features used when carving hei matua.

Effective Strategy:



HOT **Classify** Map

SOLO Learning Log:

*My **classification** is at a [insert SOLO level] outcome because*

.....

My next step is to

.....



Success Criteria for **CLASSIFY**

	I can identify several relevant groups and subgroups, give reasons why and look at them in a new way.
	I can identify several relevant groups and subgroups and give reasons why they are grouped.
	I can identify several relevant groups and subgroups.
	I can identify one relevant group.
	<i>I can identify the objects/ideas but I need help to group them.</i>

LI: [compare & contrast] [content] [context]

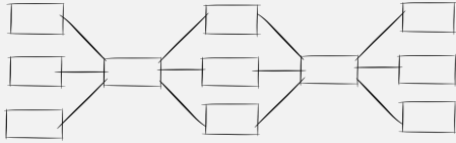
LI: **Compare & contrast** the geosphere and atmosphere on Planet Earth

LI: **Compare & contrast** a parallel line with a perpendicular line.

LI: **Compare & contrast** two strategies for profit maximisation.

LI: **Compare & contrast** examples of traditional and contemporary Tuhi Whakaniko (visual art practice).

Effective Strategy:



HOT Compare Contrast Map

SOLO Learning Log:

My compare & contrast statement is at a [insert SOLO level] outcome because






My next step is to



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Success Criteria for COMPARE & CONTRAST

	I can identify several relevant similarities and differences between [X] and [Y], give reasons why and make a generalisation (overall I think).
	I can identify several relevant similarities and differences between [X] and [Y] and give reasons why .
	I can identify several relevant similarities and differences between [X] and [Y]
	I can identify one relevant similarity and difference between [X] and [Y]
	<i>I can identify [X] and [Y] but I need help to compare them.</i>

LI: [explain causes] [content] [context]

LI: **Explain** how mountain ranges form when plates collide.

LI: **Explain** why two lines are parallel if $m_1 = m_2$

LI: **Explain** how quotas on NZ butter to overseas markets effect NZ butter production.

LI: **Explain** why the artwork “Makaro” by Gordon Walters was criticised.

LI: [explain effects] [content] [context]

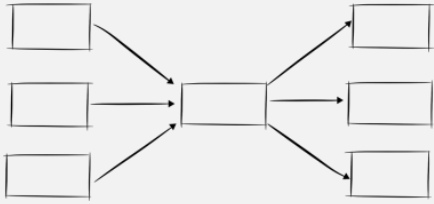
LI: **Explain** the effects of subduction on the Earth's surface.

LI: **Explain** the effect of increasing the change in y on the gradient of a line.

LI: **Explain** the impact of an economic event on economic activity.

LI: **Explain** the influence of whakapapa on Maori cultural design in an identified artwork.

Effective Strategy:



HOT Cause Effect Map

SOLO Learning Log:

My causal explanation statement is at a [insert SOLO level] outcome because

.....

My next step is to






.....



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Success Criteria for EXPLAINING CAUSE or EFFECT

	I can identify the event, several relevant causes or effects, give reasons for the causes or effects and make a generalisation.
	I can identify the event, several relevant causes or effects and give reasons for the causes or effects.
	I can identify the event and several relevant causes or effects.
	I can identify the event and a relevant cause or effect.
	<i>I can identify the event but I need help to identify a relevant cause or effect.</i>

LI:[analyse] [content] [context]

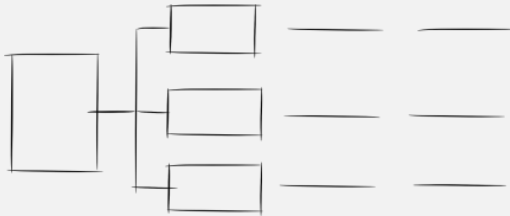
LI: **Analyse** the evidence for continental drift theory.

LI: **Analyse** the point/gradient equation $y - y_1 = m(x - x_1)$

LI: **Analyse** the circular flow model in economics.

LI: **Analyse** the pictorial features of contemporary artworks from Maori cultural contexts.

Effective Strategy:



HOT **Analysis** Map

*My **analysis** is at a [insert SOLO level] outcome because*






.....

My next step is to

.....



Success Criteria for **ANALYSE**

 and generalise about the function/ purpose of the parts to the whole, and evaluate the contribution of the parts to the whole
	... and explain what would happen to the whole if parts were missing.
	I can identify the whole and several relevant parts.
	I can identify the whole and one relevant part.
	<i>I can identify the whole but I need help to identify the relevant parts.</i>

LI: Make an **[analogy]** **[content]** in **[context]**

LI: **Make an ANALOGY** for the Earth systems – geosphere, atmosphere, and hydrosphere.

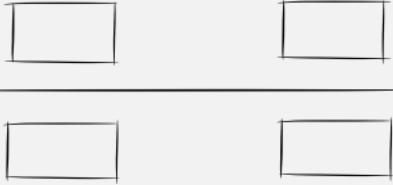
LI: **Make an ANALOGY** for a line segment.

LI: **Make an ANALOGY** for venture finance.

LI: **Make an ANALOGY** for “*Maybe Tomorrow*” by Alvin Pankhurst



Effective Strategy:



HOT **Analogy** Map

SOLO Learning Log:

My *analogy* is at a [insert SOLO level] outcome because

.....

My next step is to

.....



Success Criteria for **ANALOGY**

	<i>... and make an analogy</i>
	I can define A & B, describe significant attributes of A and B and explain how A is like B with regard to ...
	I can define A and B and describe significant attributes of A and B.
	I can define A and B.
	<i>I need help to make an analogy between A and B.</i>

LI: [**generalise**] [**content**] [**context**]

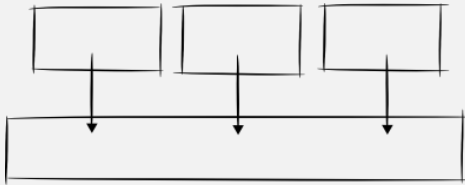
LI: **Generalise** about Earth systems.

LI: **Generalise** about the design of motorway onramps and Pythagoras' Theorem.

LI: **Generalise** about economic concept of interdependence.

LI: **Generalise** about themes of kaitiakitanga in contemporary artworks with a Maori cultural context.

Effective Strategy:



HOT **Generalise** Map

SOLO Learning Log:

*My **generalisation** is at a [insert SOLO level] outcome because*

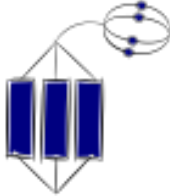




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Success Criteria for **GENERALISE**

	I can make a generalisation, clarify its meaning, provide reasons and provide evidence to support the generalisation.
	I can make a generalisation, clarify its meaning and provide reasons to support the generalisation.
	I can make a generalisation and clarify its meaning.
	I can make a generalisation.
	<i>I need help to make a generalisation.</i>

LI: **[predict]** **[content]** **[context]**

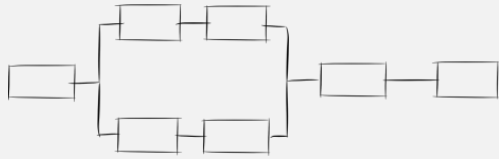
LI: **Predict** how a human activity will impact on the geosphere in 150 years time.

LI: **Predict** triangle classification by angle (right/obtuse/acute) using the Pythagoras' Theorem.

LI: **Predict** the likely effect of a proposed GST increase on markets.

LI: **Predict** a future art style for Maori facial tattoo (Moko).

Effective Strategy:



HOT Predict Map

SOLO Learning Log:

My prediction is at a [insert SOLO level] outcome because

.....

My next step is to

.....



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Success Criteria for **PREDICT**

	...and find evidence to support and/or reject the outcome, judge the likeliness of the outcome and make a prediction .
	... and explain why this evidence would support or reject the outcome.
	I can suggest several pieces of evidence needed to support and reject the possible outcome.
	I can suggest evidence needed to support and reject the possible outcome.
	I need help to test a possible outcome.

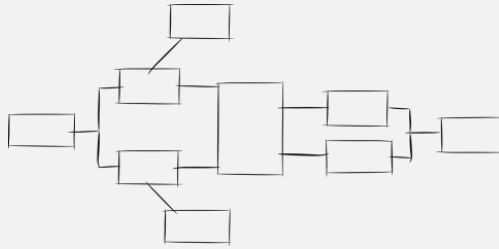
LI: [evaluate] [content] [context]

LI: **Evaluate** the impact of human activities on the hydrosphere.

LI: **Evaluate** the advantages of being a sole trader over working in a partnership.

LI: **Evaluate** the influence of European compositional practices on Maori 19th Century art.

Effective Strategy:



HOT Evaluate Map

SOLO Learning Log:





My *evaluation* is at a [insert SOLO level] outcome because

.....

My next step is to

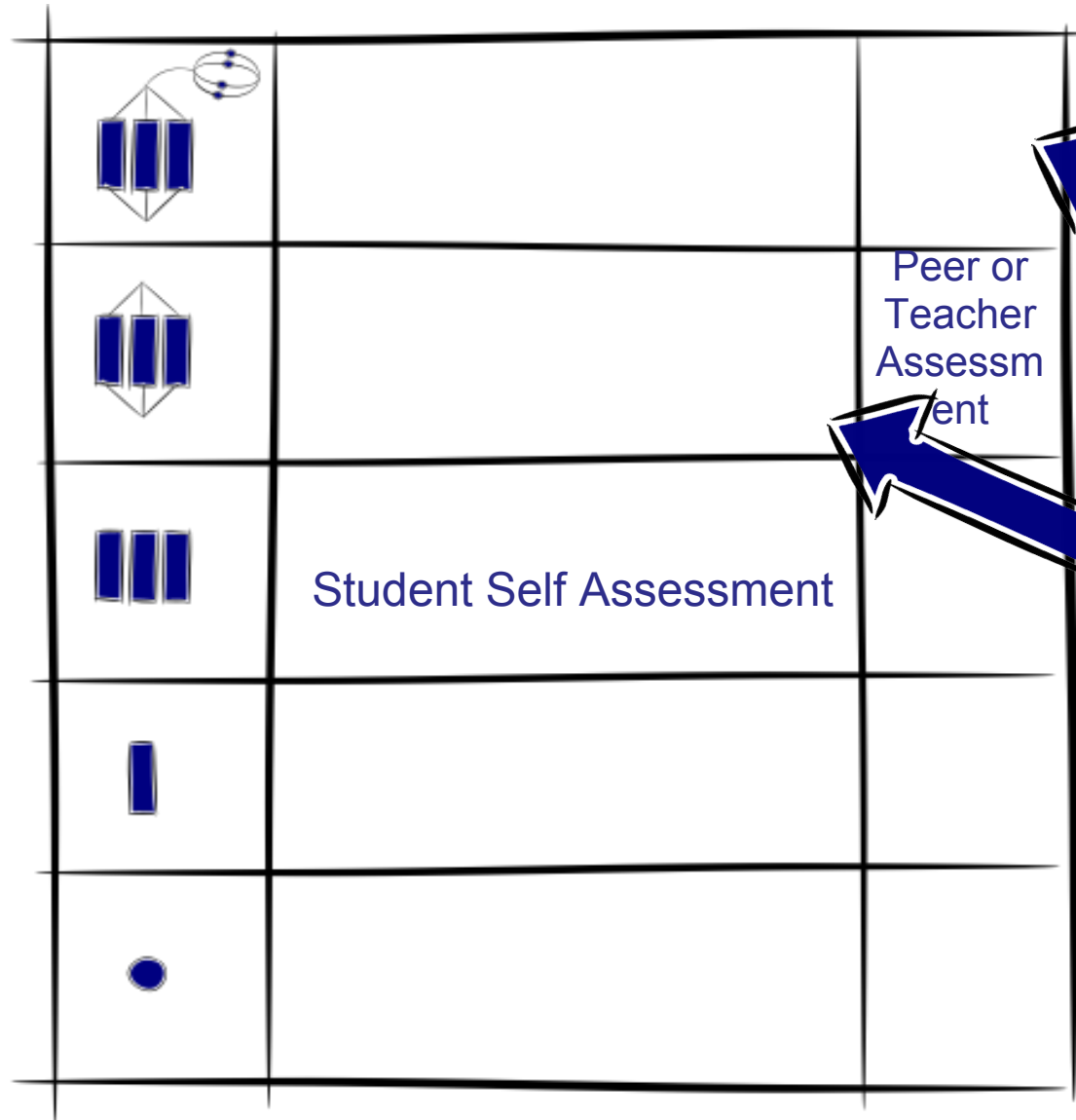
.....

Success Criteria for **EVALUATE**

	<p>... and provide evidence, and judge overall support for reasons and objections and make an overall evaluation of the claim.</p>
	<p>... and explain why they are relevant reasons and objections to the claim.</p>
	<p>I can make a claim and give several relevant reasons and objections.</p>
	<p>I can make a claim and give a relevant reason and objection.</p>
	<p>I can make a claim but I need help to give a relevant reason and objection.</p>

How reliable and/or valid is student self assessment in a learning log?

Measuring the degree of correlation between student self assessment and peer/teacher assessment.





transforming learning outcomes

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