SOLO Taxonomy and Creative Thinking

Pam Hook
www.pamhook.com

© Hooked-on-Thinking Pam Hook and Julie Mills, 2004. All rights reserved.
SOLO Taxonomy - Biggs and Collis 1982
The Structure of Observed Learning Outcomes

An act of liberation.

“... the defeat of habit by originality”.
Koestler (1970, p.98)
First, they [the characteristics of creativity] always involve thinking or behaving **imaginatively**.

Second, overall this imaginative activity is **purposeful**: that is, it is directed to achieving an objective.

Third, these processes must generate something **original**. Fourth, the outcome must be of **value** in relation to the objective.

The creative **person**.
The creative **process**.
The creative **product**.
The creative **environment**.
The Creative Person

Challenges existing practice.
Questions everything.
Connects, connects, connects.
Finds patterns and sees relationships.
Imagines what might be.
Explores ideas from different points of view.
Defers judgement and keep options open.
Critically reflects on content, process and product.

www.hooked-on-thinking.com
The Creative Process

Creativity, be it in humour, discovery, science, or the arts, is the result of a bisociative act.

Is the result of juxtaposing two ideas that normally do not get thought of together.

Koestler (1970, p.98)
HOT Relational Maps: Juxtaposing ideas that do not normally get thought of together

- Sequence
- Compare & contrast
- Analysis
- Cause & Effect
- Classify
- Analogy

SOLO Relational Learning Outcomes
Juxtaposing ideas demands flexibility, and establishes an unstable equilibrium that leads to creative originality.
HOT Extended Abstract Maps: Thinking flexibly leading to creative originality.
SOLO Taxonomy and HOT Maps and Self assessment Rubrics

Define

Describe

Sequence

Classify

Compare & contrast

Cause & Effect

Analysis

Analogy

Predictive

Generalisation

Evaluate

Create

www.hooked-on-thinking.com
<table>
<thead>
<tr>
<th>HOT SOLO Creativity Self-Assessment Rubric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I need help to think of an idea.</strong></td>
</tr>
<tr>
<td><strong>I can generate many ideas.</strong></td>
</tr>
<tr>
<td>(<strong>Fluency</strong>: The total number of interpretable, meaningful, and relevant ideas generated in response to the stimulus).</td>
</tr>
<tr>
<td><strong>I can generate many different ideas.</strong></td>
</tr>
<tr>
<td>(<strong>Flexibility</strong>: The number of different categories of relevant responses.)</td>
</tr>
<tr>
<td><strong>I can generate many different ideas and elaborate on them.</strong></td>
</tr>
<tr>
<td>(<strong>Elaboration</strong>: The amount of explanatory detail in the responses.)</td>
</tr>
<tr>
<td><strong>I can generate many different ideas, elaborate on them and create new ideas, processes or actions.</strong> (<strong>Originality</strong>: The statistical rarity of the responses among the test subjects or “new to me”.)</td>
</tr>
</tbody>
</table>
The Creative Product

“New to them thinking”

Originality and appropriateness

“In the eye of the beholder?”
The Creative Environment

Is one where ....
i) Brainstorming with categories

ii) Fluency, flexibility, elaboration, originality - Torrance 1974

iii) See Think Wonder – Project Zero

iiii) Synectics: (Gordon 1961)

- Define word
- Similar - Direct analogies - words with similar meanings/
- Feels like - Personal analogies: What would it feel like to have the characteristics or traits of…?
- Different - Antonyms compressed conflicts: What words have the opposite meaning or characteristics?
- Similar - Direct analogy – What words have the similar meaning (repeat step 2).
- Synthesis - Look at all four lists and find key words or phrases, expand on those to generate more.
- Focus on a theme that may incorporate several elements based on the final list.

iv) SCAMPER: (Bob Eberle) Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, Rearrange or Reverse
Contact

Pam Hook
pam (DOT) hook (AT) gmail (DOT) com

Julie Mills
jack-mills (AT) xtra (DOT) co (DOT) nz

© Hooked-on-Thinking Pam Hook and Julie Mills, 2004. All rights reserved.