



Reinforcement: Same Melody, Different Key

Variety in repetition, like a melody played in different keys, reinforces and extends our experience. For most learning, there is a particular set or melody of knowledge (facts, ideas, etc.) that needs to be recognized and comprehended. We can use reinforcement to build these, the first and second levels of Benjamin Bloom's Cognitive Taxonomy of Education: knowledge and comprehension. Specific verbs can indicate specific levels of learning within Blooms taxonomy.

Variety in reinforcement provides clear opportunities for the learner to re-create the content in their unique and interesting way; in Dialogue Education™ this work is in response to learning tasks which include: Dialogue, Doing and Deciding!

1. Quantity, Quality and Consistency or Coherence.

To recreate is an action! See, hear, do, feel, decide, choose, contrast, etc. Take a look at the example task taken from Learning to Listen, Learning to Teach: How Adults Learn. Imagine the actions and responses to each part of the task. How do you see reinforcement operating in this task? How would you describe the qualitative differences from one repetition to the next in this single task that is one of twenty-eight? How would you describe the consistency or coherence that is built from one part to the next?).

2. Various Victories, Vital and Vivid.

All of the following and more, embody reinforcement as recreation. YES! These are victories- the learners are the stars!

Upcoming Events

Learning to Listen, Learning to Teach

An Introduction to Dialogue Education™

April 26-29, 2011 ~ Stowe, VT
with Peter Perkins
(peterp@globalearning.com)

[register now](#)

June 7-10, 2011 ~ Raleigh, NC
with Karen Ridout
(karen@globalearning.com)

Early Bird deadline: April 12

[register now](#)

September 20-23, 2011 ~ Boston, MA
with Marian Darlington Hope
(marian@globalearning.com)

Early Bird deadline: July 26

[register now](#)

November 1-4, 2011 ~ Toronto, ON
with Jeanette Romkema
(jeanette@globalearning.com)

Early Bird deadline: September 6

[register now](#)

Advanced Learning Design

June 13-15, 2011 ~ Raleigh, NC
with Karen Ridout
(karen@globalearning.com)

Early Bird deadline: April 18

[register now](#)

November 16-18, 2011 ~ Montpelier, VT
with Peter Perkins
(peterp@globalearning.com)

Early Bird deadline: October 5

[register now](#)



- ☆ Gallery Walks
- ☆ Hearing and/or seeing each person's work
- ☆ Creating products that capture key dimensions of the content
- ☆ Presentations of a small group's work

What ideas will you add to this list?

3. Increasing Integration Implicitly and Explicitly.

In each part of The 4-A Model: Anchor, Add, Apply, and Away, we can find repetition with little to nothing that is the "same"! Let's start with integration, when we create questions that invite people to connect with what they know, learners contemplate and depending upon the task, voice the similarities and difference. This work helps with recall and comprehension. The sequence of the 4-A's deepens comprehension as it creates "repetition": Anchor content within the learner's experience, Add new content, Apply in a different situation and state the Away- project how the content will be used later. Notice WHO is doing much of the repeating here!

Check out this design, "[Designing Your Passion Tagline](#)". How do you see repetition operating in it and through the 4-A's?

4. Complexity Constellations.

Here are [four sets of four verbs](#); the first two sets are usually found in the Knowledge Level, the second in Comprehension. How might you sequence them to represent least to most complex? How might you use this in the development of your learning task, or otherwise?

5. "The Verb's the Thing."

We have [Peter Perkins](#) to thank for this piece of wisdom. If you'd like, take a look again, at the verbs in the Knowledge and Comprehension levels within Bloom's Taxonomy. For fun (!) here's a [sample list of verbs](#) that span or can serve in more than one level. How do you see yourself using THIS list most effectively?



Global Learning Partners acknowledges and thanks [Darlene Goetzman](#) for the concept and compilation of this issue of *Dialogue Education™ Tips & Tools*. [Contact Darlene](#) or any of our [Global Learning Partners team](#) about coaching and consulting services, or to bring Dialogue Education™ directly to your company or organization.



Explanation of Bloom's Taxonomy

(Adapted from [Designing Brain Compatible Learning](#), by Gayle H. Gregory and Terence Parry)

Benjamin Bloom's model, developed in the 1950s, is both enduring and useful as a way to model the enhancement of thinking. It is a developmental model in the sense that it focuses on thinking at ever greater levels of complexity. It helps us avoid simply making content more difficult, and instead makes it more complex.

KNOWLEDGE: Defined as the mere rote recall of previously learned material. All that is required is bringing it forth in the form in which it was learned. It represents the lowest level of learning in the cognitive domain since there is no presumption the learner understands what is being recalled.

COMPREHENSION: Describes the ability to make sense of the material. This may occur by converting the material from one form to another by summarizing or by estimating future trends. This learning goes beyond mere rote recall and represents the lowest level of understanding. When material is understood rather than just recalled, it is available for future use to solve problems and make decisions.

APPLICATION: Refers to the ability to use learned material in new situations with a minimum of direction. It includes the application of such things as rules, concepts, methods, and theories to solve problems. Convergent thinking is used to select, transfer, and apply data to a complete new task. Practice is essential at this level.

ANALYSIS: The ability to break material into its component parts so that its structure may be understood. It includes identifying parts, examining the relationships of the parts to each other and to the whole, and recognizing the organizational principles involved. The learner must be able to organize and reorganize in categories. This is a higher level because the learner is aware of the thought process in use.

SYNTHESIS: The ability to put parts together to form a plan that is new to the learner. It may involve the production of an essay or speech, a plan of operations, or a scheme for classifying information. This level stresses creativity with major emphasis on forming new patterns. This is the level where learners get an "Aha!" experience.

EVALUATION: At this level, learners have the ability to judge the value of material based on specific criteria. The learner may determine the criteria or be given them. The learner selects criteria that are the most relevant to the situation. Activities at this level almost always have multiple and equally acceptable solutions.

NOTE: We seek to increase the COMPLEXITY, not the difficulty of tasks. For instance, "recall" can be quite difficult! The first two levels – Knowledge and Comprehension, are at levels where learners ACQUIRE information. At the remaining four levels, they may EXTEND what they know.



Bloom's Taxonomy and Corresponding Verbs

KNOWLEDGE LEVEL	<ul style="list-style-type: none"> ➤ Described ➤ Identified ➤ Listed ➤ Located 	<ul style="list-style-type: none"> ➤ Labeled ➤ Defined ➤ Matched ➤ Named 	<ul style="list-style-type: none"> ➤ Outlined ➤ Recalled ➤ Recorded ➤ Indicated
COMPREHENSION LEVEL	<ul style="list-style-type: none"> ➤ Explained ➤ Given examples ➤ Summarized ➤ Paraphrased 	<ul style="list-style-type: none"> ➤ Classified ➤ Compared ➤ Contrasted ➤ Converted ➤ Interpreted 	<ul style="list-style-type: none"> ➤ Differentiated ➤ Distinguished ➤ Estimated
APPLICATION LEVEL	<ul style="list-style-type: none"> ➤ Deduced ➤ Inferred ➤ Predicted ➤ Adapted ➤ Related 	<ul style="list-style-type: none"> ➤ Solved ➤ Modified ➤ Practiced ➤ Prepared ➤ Examined 	<ul style="list-style-type: none"> ➤ Utilized ➤ Illustrated ➤ Discovered ➤ Applied ➤ Completed ➤ Demonstrated
ANALYSIS LEVEL	<ul style="list-style-type: none"> ➤ Subdivided ➤ Classified ➤ Analyzed ➤ Organized 	<ul style="list-style-type: none"> ➤ Dissected ➤ Categorized ➤ Proposed ➤ Specified 	<ul style="list-style-type: none"> ➤ Summarized ➤ Diagrammed ➤ Deduced ➤ Discriminated
SYNTHESIS LEVEL	<ul style="list-style-type: none"> ➤ Induced ➤ Generalized ➤ Created ➤ Composed 	<ul style="list-style-type: none"> ➤ Integrated ➤ Combined ➤ Planned ➤ Developed 	<ul style="list-style-type: none"> ➤ Selected ➤ Constructed ➤ Generated ➤ Recommended
EVALUATION LEVEL	<ul style="list-style-type: none"> ➤ Judged ➤ Compared ➤ Contrasted ➤ Appraised 	<ul style="list-style-type: none"> ➤ Graded ➤ Criticized ➤ Justified ➤ Ranked 	<ul style="list-style-type: none"> ➤ Assessed ➤ Critiqued ➤ Determined ➤ Measured

SOURCE: Parry & Gregory (1998). *Designing Brain Compatible Learning*. IL: Skylight Publishing.



Learning Task #3: How Adults Learn

Source: *Learning to Listen, Learning to Teach*

3A. In pairs, **describe** a really good learning experience *you* have had as an adult.

Then, **analyze** it. **Name** 1-2 factors that made it so good and **write** them on sticky notes, *one per note, using large markers*.



We'll **share** all your factors, then **compare** them with research on adult learning.

3B. **Listen** to this brief lecture on adult learning research. As you listen, **note** the points that resonate with your learning experience.

How Adults Learn: Six Factors

(Malcolm Knowles)

Respect – Teacher/facilitator actions show respect for the experience and knowledge adults bring and those actions are observed and felt by the learners.

Immediacy – “How soon can I use this?” – during the event and in own setting.

Relevance – Learners will learn faster and more permanently that which is significant to them and to their present lives.

(Jane Vella)

Safety – People need to feel safe *and* challenged – hold the opposites!

Engagement – People learn more when they are actively involved, *doing* what they are learning.

Inclusion – Without inclusion, a learning group is fragmented. With inclusion, a learner is moved to collaborate and is open to learning.



Adults retain...
20% of what we **hear**
40% of what we **see and hear**
80% of what we **hear, see & DO**
(Knowles research)

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- 3C. **Compare** your group's research on adult learning in Learning Task #3A with the formal research in Task #3B.

What do you notice?

What questions and insights arise as you consider these factors in light of your current situation?

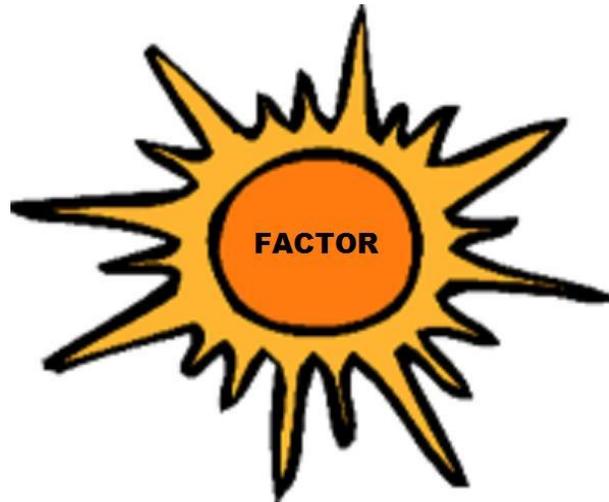
- 3D. At tables, **choose** one of the six factors to work on: *Respect, Immediacy, Relevance, Safety, Engagement, Inclusion.*

Using a Sun Graphic Organizer, **write** your factor in the center.

Respond to this question:

What is it that tells you or shows you that your factor is present in a training event?

Write your responses to the question on the rays of the sun. When you are finished, **post** for others to review.



As you see what others have written, **consider** this question:

How could you, as a teacher or trainer, provide these factors for your learners?

Share your insights in the whole group.



Complexity Constellations

Here are four sets of four verbs; the first two sets are usually found in the Knowledge Level, the second in Comprehension (see Bloom’s Taxonomy). How would you sequence them to represent least to most complex? How might you use this in the development of your learning task, or otherwise?

Knowledge Level			
Recalls	Matches	Named	Recorded
Located	Described	Indicated	Outlined

Comprehension Level			
Summarized	Estimated	Compared	Given examples
Paraphrased	Classified	Distinguished	Converted



“The Verb’s the Thing”

Acted	Activated	Adapted
Addressed	Differentiated	Tested
Devised	Administered	Labeled
Adopted	Adjusted	Analyzed
Organized	Drafted	Proven
Examined	Discussed	Argued
Articulated	Appraised	Modified
Represented	Displayed	Hypothesize
Asked	Respond	Researched
Assessed	Monitored	Documented
Budgeted	Brainstormed	Participated
Built	Performed	Reasoned
Calculated	Engaged	Challenged
Classified	Concluded	Planned
Established	Catalogued	Posed
Helped	Estimated	Clarified
Conducted	Predicted	Compared
Rated	Established	Prescribed
Computed	Evaluated	Completed
Prioritized	Utilized	Combined
Considered	Presented	Developed
Exhibited	Produced	Detected
Experimented	Explained	Explored
Pursued	Expressed	Questioned
Found	Gather (evidence, etc.)	Generalized
Reflected	Recognized	Designed
Given (reasons, examples, etc.)	Connected	Identified
Retrieved	Illustrated	Derived
Justified	Reviewed	Incorporated
Described	Revised	Judged
Contrasted	Induced	Role-played
Corrected	Searched	Created
Decided	Inspected	Critiqued
Instructed	Selected	Integrated
Showed	Deduced	Interacted
Defended	Interpreted	Visualized
Defined	Invented	Used