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Focus on Innovation

Focus on Innovation is a monthly electronic newsletter designed to provoke thoughts and ideas on how to bring innovation to life within the organizations in which we work.

For Those on the Run

Analogies and metaphors can trigger breakthrough ideas in artistic, literary, scientific or technological innovation. There are numerous examples that show that substantial innovations have resulted from transferring the problem from one domain or industry to another. This month's newsletter provides information on the use of analogies or metaphors for breakthrough ideas.

Breakthrough Ideas Through Analogical Thinking

"The world is full of hopeful analogies and handsome, dubious eggs, called possibilities." --George Eliot, English Victorian Novelist.

Analogies and metaphors can be used to identify problems and better understand their causes, and to generate alternative solutions and ideas. When we think analogically or metaphorically, we take ideas from one context and apply them to a new context, producing the new idea combination, new transformation, new theoretical perspective or more colourful literary passage. We "make a connection" between our current problem and a similar or related situation. The frequent comments "was inspired by" and "is based upon" indicate that ideas for a specific creation were suggested by or borrowed from another source by the particular artist, scientist, designer, business entrepreneur, etc. For example, the designers of the Nike SHOX used the same suspension concept like the technologies applied for Formula 1 racing cars; James Watt's steam engine was inspired by the jangling lid of his mother's tea kettle, etc.

An analogy is a comparison of two things that are essentially dissimilar but are shown through the analogy to have some similarity. A metaphor, on the other hand, is a figure of speech in which two different universes of thought are linked by some point of similarity. Typically, a metaphor treats one thing as if it were something else in order to point out a resemblance you would not ordinarily perceive. Because the distinction between analogy and metaphor tend to be blurred, the two terms tend to be used interchangeably. Here are three ways that you can use analogical thinking to come up with breakthrough ideas for a problem or situation you are trying to solve.

- Think of an analogy between your challenge and something else, i.e. growing a vegetable garden to come up with insights on growing productivity of your sales force or how is my problem like a zoo?

Then ask yourself what insights or potential solutions the analogy suggests. The idea is to force yourself to make connections from your problem to something else; to create new linkages.

- First think of your problem and then write five metaphors that describe the problem. Next, for each of the five metaphors listed, ask, what insights it provides into how to solve your problem. What solutions do your metaphors suggest? For example, how does the metaphor "life is a maze" provide you with insights towards how to help staff through a major change.
- Try the "Parallel Worlds" technique that combines both the use of metaphors and analogies:
 1. Find a Parallel World - select some activity or situation that somehow parallels your problem situation. "Parallel worlds" can come from areas of life or history such as the worlds of sports, fashion, astronomy, Greek history, soap operas, etc. The world you select should also be something you know a little about; ideally picking a specific event, moment, or example which epitomizes that world, i.e. the "1927 New York Yankees" would be better than using "World Champion Baseball Teams."
 2. Set up a Forced Association Grid - put the example from your parallel world on the left hand side of your page (Stimuli Column) and your problem situation: How to (your problem)? (Insights Column) on the right side of your page.

Example: Two companies have merged their headquarter operations, which are now located in one of the company's facilities which has dramatically decreased the floor space for offices.

Stimuli (Fall Country fair)	Insights (How to assist staff in adjusting to limited office space?)
<ul style="list-style-type: none"> • Horse barns • Country music band • Games • Temporary tents/rides • Competitions • Different food/smells • Cotton candy • Tent raising • Sheep shearing • Merry-go-round 	<ul style="list-style-type: none"> • Free and convenient parking • Pipe in live music or radio • Have a games room • Set up modular offices with no fixed walls • Compete for the most efficient use of space • Improve environment • Snack area • Very comfortable meeting space • Have everyone participate in the set up of the office and have a party to celebrate • Get rid of junk in office • Allow people to decorate their own "space"

3. List characteristics - list as many unique characteristics of your example as possible in the Stimuli Column. The more characteristics, you can think of, the better your chances are of discovering a unique insight.
4. Complete the forced relationship - use the unique characteristics in the Stimuli Column to unlock insights in the Insights Column. Make flexible connections between those features and aspects in the Stimuli column to your problem situation. Remember that each entry in the Stimuli Column may stimulate more than one idea in the Insights Column. Try to let your ideas flow.
5. Pick the best idea - looking through the Insights column, check the idea that has the greatest potential for solving your problem then work on turning it into a practical solution.

What's the Bottom line

One cannot overstate the benefits of analogical and metaphorical thinking towards inspiring creativity. Whether used informally or formally, analogical and metaphorical thinking will lead to breakthrough ideas.

This article was adapted from: Gary A. Davis, *Creativity is Forever*, Kendall/Hunt Publishing Company, 1998 and Stephen Grossman, Bruce Rodgers & Beverly Moore, *Innovation Inc.* Wordware Publishing, 1988.



Please feel free to pass this newsletter on to others.

If you would like more information about the ideas and topics listed in this issue, contact Judy Laws, Ph.D. at jlaws@foursightconsulting.com.

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