

# Learning from Nature: Lessons Distilled by Focused Awareness

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## ABSTRACT

One of the better-known techniques of drawing lessons is the use of metaphors in learning experiences. And what better way to draw metaphors in organizational processes than to bring organizational members to the greatest resource of metaphor - that is nature.

This paper illustrates how the learning facilitator uses metaphors to draw lessons from participants communing or interacting with nature in the mildest to the most extreme form: walking, trekking, dipping, swimming, boating, climbing, jumping, spelunking, diving or simply being there sensing Mother Nature go through its own course. Lessons that could be synthesized are bountiful: from individual accountability to motivation and personal effectiveness; from maintaining balance to dealing with change; leadership to membership roles; communication to power dynamics; teamwork to coordination and organizational effectiveness.

Only the skills of the facilitator may limit his/her ability to maximize the learning opportunities posed by nature, as learning from it is as vast and limitless - like nature itself.

## INTRODUCTION

The easiest way for a facilitator to make a learning/training intervention the least stressful, and therefore the most enjoyable, is to bring participants to a resort near

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\* Associate Professor and Dean, UP SOLAIR. Paper presented at the 30<sup>th</sup> ARTDO International Conference, Macao, 25-28 September 2003. Professor Palafox started handling nature-adventure programs for corporate teambuilding and managerial development interventions as early as 1997, including 150 employees trekking Mt. Makiling and shooting the rapids of the Pagsanjan gorge, and going under its ice-cold falls.

nature. That is probably the primary reason why most training programs are done outside the city. But not the only reason.

Imagine trying to utilize the greatest source of training energy to fuel all sorts of learning experiences among participants. The use of the natural environment can be integrated among the usual and traditional modes of learning delivery, if not the sole and primary mode of experiential learning, if only the facilitator can expertly guide participants to process or draw lessons from the experience.

This paper will propose:

- (1) ways of integrating learning from nature in the design of learning programs specifically in the formulation of objectives as well as methodologies; and
- (2) illustrate using actual experiences how elements of nature can be utilized in allowing participants to draw learning experiences from interacting with nature.

## **INTEGRATING NATURE IN DESIGN OF PROGRAMS**

All learning objectives have content base (i.e. knowledge inputs), while all learning experiences start with awareness or cognition (see taxonomies). This assumption points the program designer to utilize the potent power of creating awareness or adding on new knowledge while interacting with nature.

### ***Focused Awareness as an Intended Objective***

It is critical that the intent of integrating learning objectives related to experiencing with nature be consciously designed from the start. The most obvious objective can be awareness. In contrast to a controlled classroom environment, being with nature can expose the participant to a myriad of stimuli, thereby confusing him or drowning the intended objective of the learning program. The program designer thus has to focus awareness on intended elements of the nature-experience.

This characteristic of nature-experience has critical implications on the program designer. First, he/she must have gone initially thru the nature-experience itinerary. While he/she has first experience, it must also be deeper and more engaging, absorbing as much from the experience than what first-timers could. The facilitator's wider, deeper and more insightful experience with the intended encounter with nature assures him/her of a wider array of elements to incorporate in his/her program. He/she must have spotted critical aspects of the target-nature experience, so that

as a program designer, he/she can thus integrate elements of nature in that itinerary to be the focus of the learning experience.

*How would the learning program designer choose which nature-elements to focus on?* The stimuli in the nature-experience must evoke some emotional, meaningful, fun, amusing, or at the very least attract personal interest. Those reactions should stir up some enthusiasm in the participant. Enthusiasm, in turn, would focus awareness or attention. This *focused awareness* or *attention*, as directed by the facilitator, would allow all participants to share similar, if not converging, experience about a certain phenomenon.

Awareness, the literature says, is the initial step in the learning process. Awareness is supposedly an encroachment into consciousness. When one's consciousness is piqued (with all attendant processes), a change in cognition, affect or behavior might occur – the change being learning. Learning (a temporary or permanent change in behavior) is the objective of all training interventions. Let it be reiterated that awareness (as in simply the search for insight) must not be the goal in itself in a nature experience, but rather awareness (and understanding) that leads to action or relevant behavior in the workplace.

The particular approach of increasing awareness as a basis for changed behavior uses the models by Ellis<sup>1</sup> and Beck<sup>2</sup>. Their models of changing personality and behaviors believe that thought (or the process of rational thinking) influences (to the extreme, even controls) feelings and behaviors. Awareness and thinking are interlocking brain processes that can affect feeling and action. Thus, focused awareness strengthens, or direct changes in affect and behavior – same objects of training interventions.

*How does the facilitator employ focused awareness?* All stimuli enter sensory gateways – sight, hearing, taste, feel and smell. The facilitator uses the most relevant sense to increase awareness, for example – to look at scenery; to smell pungent odor; to feel a smooth leaf; to taste a sweet fruit; and to hear the elegant song of a bird. A nature's trek becomes just that – a trek – unless it is directed at relevant stimuli. So a facilitator must focus awareness on relevant phenomena that shall be processed as learning inputs on the spot, or later.

If using one sense is fine, then using multi-sensory techniques must be more effective in heightening awareness. How better to describe the girth of a tree? By describing it as "having a circumference of ten meters" or with six people joining hands to encompass it? How better to describe the bright orange/yellow feathers of an oriole than to actually look at it through binoculars or at a closer range? How better to describe the untainted purity

of spring water than to drink it? How better to describe the icy cold water of a fall than to be under it? How better to describe the feel of fog in the early morning than to actually have it caress your cheeks? The use of multi-sensory techniques has been proved more effective than just using one sense, in total learning effectiveness and not just in increasing awareness.

While at the nature environment, it also helps to describe a phenomenon graphically so that it can be referred to commonly in the workplace. This is *graphic imprinting* – the labeling graphically of an occurrence – like a sight, a noise, a smell, usually with proper nouns, or dramatic adjectives to assist participants for longer retention. Samples of graphic labels (in the Philippine local language) include:

- *bahong nakamamatay* (odor that can knock you out)
- *suso ng dalaga* (literally, the breasts of a virgin)
- *nag-uumpugang bato* (knocking rocks)
- *magka-ulayaw na niyog* (coconut trees in lovelock)
- *paa ni Goliath* (the footprints of Goliath)
- *batis na kulay patis* (spring the color of fish sauce)
- *nagsisiksikan parang sardines* (packed like sardines)
- *madulas pa sa grasa* (more slippery than oil)
- *nangangalit na sampal ng alon* (angry splash of waves)

## ILLUSTRATIONS OF FOCUSED AWARENESS

Look at the following illustrations and see if you can conjure labels and imagine intense awareness:

- Mountain hike: one can focus on energy expended, how trails or paths are trail blazed and followed
- Flora: see patterns of symbiosis; interesting and unusual plants; mutual interdependence of plants; competition for light; flowers, seeds, growth, continuity
- Fauna: survival instincts of animals; the food chain; balance; how every living being is able to survive yet have much less ability or resources than man
- River or streams: the clarity of water; boundless energy of the flowing river; constancy of movement or change; how it supports marine life or communities; the wonders of water; even pollution
- Beachfront: sand; waves; salty or brackish water; buoyancy; wind

- Waterfall: gravity; boundless energy; life sources
- Climbing: gravity; falling; and
- Nature adventure: can focus on feelings of mortality and vulnerability

Focused awareness, if handled effectively, becomes the first step towards effective learning with nature. Argyris (1982)<sup>3</sup>, for example, shares that awareness stimulation in a counseling environment assists clients towards better understanding of their situation through or by:

- seeing things more clearly
- getting the picture
- getting insights
- developing new perspectives
- spelling out implications
- perception transformation
- developing new frames of reference
- looking for meaning
- perception shifting
- seeing the bigger picture
- framebreaking
- developing different angles
- seeing things in context
- rethinking
- getting a more objective view
- interpreting
- overcoming blind spots
- analyzing
- second level learning
- double-loop learning
- reframing<sup>4</sup>
- thinking creatively
- re-conceptualizing
- discovery
- having an "ah-hah" experience
- developing a new outlook
- getting rid of distortions
- relabeling, and
- making connections

The above could be the results of focused awareness in a nature setting.

## **INTEGRATING NATURE-EXPERIENCE AS LEARNING OBJECTIVES**

Given that the program designer has gone through a nature experience, he/she is now ready to integrate it into a learning activity.

In any given program's objectives, one usually finds behavioral objectives like, "the participant should be able to discuss the basic principles of effective management, and their implications on being an effective manager." The program designer must try incorporating the nature-experience into such behavioral objective.

Nature element can be the condition, as in "using awareness of nature, participant should be able to apply basic principles of management on being an effective manager." Or the behavior itself - "the participant should be able to discuss concept of work/life balance as illustrated by the nature-experience."

When the nature-experience is integrated into, and is a conscious part of the learning program, it is thus fully utilized, not just an accidental exposure or "merely an enjoyment" part of a learning experience. In addition, the facilitator is fully prepared for a systematic treatment of the experience towards learning objectives.

## **DRAWING LESSONS FROM NATURE THROUGH INSPIRED METAPHORS**

Using the experiential model (Pfeiffer, 1977; McCaffey, 1986; Snow, 1992)<sup>5</sup>, trainers know that lessons must be processed, generalized and applied out of a structured experience. The facilitator must draw awareness from the experience by sharing and processing (some call it debriefing), which could be used in generalization and application of lessons learned (some call it realizations).

In a training room setting, the facilitator may have control over a number of stimuli and the whole experience itself. But in the outdoors, processing the experience is doubly challenging, as the earlier description is not the case. There's a whole lot more of stimuli. As participants are not within the confines of the four corners of a room, their attention may not be as focused.

In the outdoor environment, processing can occur with the experience itself (or immediately after), as some participants may draw attention of the facilitator and other participants to a

phenomenon that interests them. The facilitator must urge participants to focus on that phenomenon so that participants have that common experience (e.g. look at how the canopy has blocked almost all light... how will this sapling survive? Look at how a vine used a tree to survive, only to strangle it later; see those droppings on the forest floor, how are they useful to others?, etc.)

Having tried his best to mold the participants' experience into some convergence (i.e. common focused awareness of certain phenomena), the facilitator may now draw lessons from it.

In the next stages of the experiential cycle, I use inspired metaphors.

### ***Inspired metaphors***

*Metaphor* is a figure of speech that denotes one kind of object or action in place of another to suggest likeness or analogy between them. It is best to use inspired metaphors to draw learnings from the nature-experience. Metaphors in themselves may not be compelling enough for dynamic impact. By inspired metaphors, I intend to mean the use of dramatic, engaging, positive, uplifting, interesting, emotional<sup>6</sup> - exactly inspiring analogies to introduce, illustrate, process or distill lessons drawn from nature-experience.

These metaphors can be prepared way ahead if the facilitator had sufficient time for preparation and exposure in the same nature-experience. It can be tricky because the natural environment can change, except of course, basic characteristics of elements like water, fire, gravity, wind, light - these will always be consistent.

A technique in metaphor drawing is personalization. This is to endow a phenomenon with a human quality or qualities. The facilitator does this by asking participants to view a natural phenomenon to represent a human characteristic or to relate own real life experiences. To illustrate, the facilitator can ask very direct questions like:

- "Why are flowers very attractive?" (to recreate, to attract bees, birds to pollinate) "How does a person attract others?" (Like a flower, she slowly unfurled her petal-like suit to reveal the most intimate of pistils!!!????)
- "What are the functions of a dying tree in a forest, as it is analogous in the workplace? (old technology being replaced by new technology; some can cope, some can't).

To draw metaphors, the facilitator must not be so obvious but can direct participants to draw these from nature. After

discussion of focused awareness on any phenomenon, a tag line for processing could be something like:

- Look at the line of ants; does it remind you of workplace dynamics?
- Do you ever wonder why these ants behave like they do?
- Gravity is constant in force, why can't men do that with motivation?
- There's so much diversity in the forest, yet all living things seem to be doing well?
- In bungee jumping, in ordinary circumstances we feel falling (thus fear uncontrolled use gravity), but how come we enjoyed falling/jumping?
- After a six-hour hike, what was it all about?

Other situations that could provide inspired metaphors include:

- Conquering fear of heights in jumping or climbing
- Emotions evoked by the sun setting or rising sun
- Endless lapping of the waves
- The action of waves on rocks
- The rotting tree supporting other life
- Colors of flowers that can't be recognized by animals or insects

Let me share some real experiences. My partner (co-facilitator/wife Joy) and I took more than 20 middle-aged and not a few more than 50 year-old managers to Pagsanjan resort to tackle its ropes facility on the first day and to brave the rapids and the waterfall the second day. The main objective was for participants to show more motivation at work, as measured by increase in sales.

After dealing with the usual elements of teambuilding in the processing of experiences during the low and high ropes exercise, I zeroed in on the element of gravity thru inspired metaphors. What follows is a dramatized version of how the processing went.

Facilitator: What was going on in your mind while you were climbing that 50-foot facility?

Pax: *Takot, pero kaya naman ng iba, at saka nakakahiya kung di ituloy!* (Was afraid, but others were able to do it. It would be embarrassing not to try it myself!)



Facilitator: How did you know you were afraid? How did you conquer fright?

Pax: *Nanginginig, nanlalamig, parang mahina ang tuhod...Wala, tuloy lang ang akyat.* I was trembling, cold even, my knees were shaking... I continued climbing.) I tried not to look down.

Facilitator: *Saan ka natakot?* (At what point were you afraid?)

Pax: *Baka mahulog, sa height...* (I might fall; of the height.)

Facilitator: Yeah, but you were in double harness.

Pax: *Kahit na, di sanay* (Even so, I was not used to it). My first time, eh.

Facilitator: *O, sige,* while you were traversing the rope, what were you thinking of?

Pax: *Takot pa rin* (I was still afraid), but it was the first time that I was looking down on trees, and so far up from the ground. *Iba ang pagtingin* (a different perspective was involved).

Facilitator: Hmm, perspective... (that one could have been a window to another lesson, but I let it go). *Ano pa?* (What else?)

Pax: *Takot mahulog* (I was afraid I might fall).

Facilitator: *Di ka naman nahulog a* (But you didn't). But just in case, what would pull you down?

Pax: Gravity, *di ba?*

Facilitator: (Turning to others) How many of us were able to traverse till the end of the wire? And jumped? (a number of raised hands). Did we enjoy the jump? How did you feel?

[Some answers include "rush", "adrenaline", "giddy", "sarap" (great!), "tight belly", enjoy, etc.]

Facilitator: In general, we enjoyed it right? *Teka muna, di ba sabi natin kanina* (But earlier, we said) we were afraid of falling, (gravity would pull us down), *pero* (but) when we jumped we enjoyed it.

I then did a lecturette on gravity, after which used metaphors related to consistency of gravity pull to need for consistency of motivation; accelerating speed of an object when falling to need for accelerating motivation, and so on.

I did the same with the rapids and the trip under the waterfall. The Pagsanjan gorge was as gorgeous as ever. I related it to tranquility (need for work/life balance); the skilled boatmen (the prospects of yet unfulfilled competences; everything can be learned; and as always, teamwork); etc.

The rapids were dangerous but exhilarating (therefore organizational dynamics could also be two-edged). The waterfall hit us heavy but the cold water was also a new experience, which I related again to motivation (i.e. try to conquer new markets), it could be cold water (there will be calls that are not converted), but it could also be exhilarating (there could be calls converted).

An author states, "Learning through metaphor occurs through making connections between seemingly unrelated experiences. This transfer of learning occurs through lateral thinking: capturing similarities or "coincidences" among diverse situations that represent patterns of behavior... By making the connection between specific incidents (in a nature-experience) and other aspects of (organizational) life, (members) use metaphor consciously. Alternatively, metaphor can benefit a person unconsciously. Some participants return to their work environments with more self-reliance and confidence without consciously knowing why." (Snow, 1992) The lessons can be appropriate not just for individuals, but also for work groups.

It should not be surprising that the metaphors are endless in all Nature encounter.

## CHALLENGE

I picked up a book on *Nature* (Dorling Kindersley, 1994) and noted some descriptions of varied topics. In it is a rich trove of metaphors for organizational effectiveness - it is just a matter of learning with nature, with the natural environment, spotting that phenomenon that relates to an organizational concept. I see thousands in the following that could be sources of inspired metaphors; I challenge you to look for them in every setting of nature:

- In description of ants, "singularly programmed instinct to hunt food and provide for the colony"; collective intelligence of yet "small brained" creatures.

- Flowers: "Whatever their size, shape or color, all flowers are made up of the same basic parts. These parts perform a flower's most important function, which is to bring about pollination to produce seeds for reproduction."
- Plants cannot move around to seek out food or better conditions. However, they can use special kinds of growth to reach towards light and raw materials, and to react to their changing environment.
- Plants can make their own food. They trap the sun's energy with their leaves and use it to make food from simple substances.
- The most visible part of land plants is the shoot, which stretches towards the light. The shoot is supported beneath the soil by a network of roots, which is sometimes larger than the plant above ground.
- When a pollen grain lands on a suitable flower, and extraordinary chain of events begins, which results in the production of seeds.
- Plants use fruits as a way of scattering their seeds far and wide.
- Birds are the most powerful and widespread flying animals. Some birds use their wings for short burst of flight. Others stay in the air for weeks or months at a time, collecting the food they need on the wing.
- Mammals are the most diverse of all animal groups – a bat and zebra look very different, but they are both mammals.
- In the animal world, movement is a sign of life. Many animals move about to find their food and to escape from predators. Some also move to seek out partners, and to bring up their young.
- Animals use their sense of vision to see the outside world, and for many mammals it is the most important sense of all.
- Most living things depend on other species for their survival. One species usually exploits another, but two species can sometimes join forces in the struggle to survive.

There is so much to be attentive for (i.e. focused awareness) in every Nature encounter and to draw lessons from it (i.e. inspired metaphors).

Nature is just waiting.

## ENDNOTES

- <sup>1</sup> Albert Ellis as cited in Morley Segal, *Points of Influence, a guide to using Personality Theory at Work*, 1997. San Francisco: Jossey-Bass.
- <sup>2</sup> Aaron Beck as cited in Morley Segal, *Points of Influence, a guide to using Personality Theory at Work*, 1997. San Francisco: Jossey-Bass.
- <sup>3</sup> Argyris C. (1982) *Reasoning, learning and action*. San Francisco: Jossey-Bass.
- <sup>4</sup> Egan, Gerard (1986). *The Skilled helper. A systematic approach to effective helping*. Pacific Grove, California: Brooks/Cole Publishing Company.
- <sup>5</sup> Pfeiffer, William J. and others, 1977. *Handbook of structured experiences for human relations training*. La Jolia, California: University Associates, Vol. VI.; Snow, Harrison, 1992. *The power of teambuilding: using ropes techniques*. San Diego: Pfeiffer. McCaffey, 1986.
- <sup>6</sup> While focused awareness uses cognition as a gate for change in behavior, use of inspired metaphors switches on feelings (affect) to strengthen the learning process. This reiterates Rogers' model of utilizing feelings as points of influence to better awareness, understanding and action. Rogers identifies awareness or lack of awareness of feelings as well as feeling themselves as keys to understanding and influencing behavior. At this point, therefore, we have covered both cognition and affect as entry points to effective learning. (Carl Rogers as cited in Morley Segal, *Points of Influence, a guide to using Personality Theory at Work*, 1997. San Francisco: Jossey-Bass.)