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## Organizational Learning Portfolio

### A new change model: Factors for initiating and implementing personal action learning

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**Abstract** This paper embraces new ways of thinking about learning, knowledge, action and change to suggest a personal action learning change model. A set of factors is described through which an individual can initiate and implement personal change from the inside out, that is, from their own volition.

**Purpose**—To provide a new frame of reference for considering change.

**Design/methodology/approach**—Following an introduction and definitions, people and organizations are considered as complex adaptive systems. The relationship between the knowledge worker and the environment is then explored by the mind/brain perspective prior to presenting an explication of the factors included in the personal action learning change model.

**Findings**—The set of factors in the personal action learning change model represent a significant force for energizing action and initiating change.

**Originality/value**—This is a new frame of reference for considering change.

**Keywords:** change, action learning, change model, mind/brain, complex adaptive systems

**Paper type** Research and Experiential

#### Introduction

With learning comes knowledge, with knowledge comes action and with action comes change. Learning, knowledge, action and change are as natural to human living as the water we drink and the air we breathe. Yet—as all managers know—not only can change be difficult for individuals, but it is often an up-hill battle for organizations.

As our understanding of the mind/brain unfolds in concert with neuroscience research findings, new ways to think about learning, knowledge and change are emerging. Exploring these new frames of reference can provide insights that suggest new behaviors. This short portfolio paper offers one such new frame of reference. This personal action learning change model describes a set of factors through which an individual can initiate and implement personal change from the inside out, that is, from their own volition. The job of managers is to create an environment where these factors can occur.

#### Definitions

We consider knowledge as the human capacity (potential or actual) to take effective action in varied and uncertain situations (Bennet and Bennet, 2004). More specifically, knowledge can be considered as having the following six attributes: understanding, meaning, insight, creativity, prediction and action. Thus knowledge is the capacity to understand situations, recognize their meaning and implications, identify underlying problems (versus symptoms), create solutions,

make decisions and implement effective actions. By tying knowledge to action (Bennet, 2005), it is coupled to learning via changes in behavior, as proposed by many authors in the area of experiential learning (Illeris, 2002; Kolb, 1984; Maples and Webster 1980; Merriam et al., 2007; Omrod, 1999).

Another advantage of using a grounded definition for knowledge is that it ties knowledge directly to the performance of every organization. This occurs because what every individual in an organization does on any given day (the actions they take) *completely determines the performance of that organization that day*. Since knowledge is defined as the individual's capacity to take effective action, knowledge directly influences performance.

Learning is considered the creation or acquisition of the capacity (potential and actual) for people to take effective action. From a neuroscientific perspective, this means that learning is the identification, selection and mixing of the relevant neural patterns (information) within the learner's mind *with* the information from the environment to create understanding, meaning and anticipation of the results of selected actions. Thus the external environment is providing information patterns that are complexed with internal information patterns of the individual to create knowledge. This is the process of individual learning.

Organizational learning is the sum of all learning processes within an organization. This includes not only individual learning, but also social learning from conversations to team dialogues to community meetings. In other words, organizational learning represents the learning processes throughout the organization that help individuals create or acquire the knowledge necessary for the organization to survive, compete and grow in a changing environment. Since learning is the creation of knowledge, both learning and knowledge are involved in every business case.

Learning is a dynamic process that manifests itself in the continuously changing nature of individuals and organizations, exemplified by innovation, collaboration, culture shifts and personal development. Thus both the organization and the individuals in the organization are continuously changing. This is not intended as a value statement, rather it is a description of the natural change process. Whether change makes an individual or organization better or worse is a value judgment.

### **People and organizations as complex adaptive systems**

The complexity of a system is measured by its variety, the number of possible states that the system can have (Bennet and Bennet, 2004). A state is a specific configuration of the system. People and organizations can be considered complex adaptive systems. They both contain many components that interact with each other. They are both partially ordered systems that unfold and evolve through time, and are mostly self-organizing, learning, and adaptive. To survive they are always creating new ideas, scanning the environment, anticipating the future, trying new approaches, observing the results, and changing the way they operate. To continuously adapt they must operate in perpetual disequilibrium, which results in some unpredictable behavior. Having nonlinear relationships, complex adaptive systems create global properties that are called emergent because they emerge from the multitude of elements and their relationships (Bennet and Bennet, 2008).

An organization has a large number of options and choices of actions it can take to adjust itself internally or when responding to, or influencing, its environment. The people in organizations are semi-autonomous and have varying levels of self-organization. They operate and direct their own behavior based on rules and (hopefully) a common vision of the

organization's direction, working in small groups to take advantage of the local knowledge and experience of coworkers. It is the aggregate behavior (actions) of all these workers that can be observed as organizational performance. The interactions that create this performance are numerous, complex, and often nonlinear, making it impossible to derive global behavior from local interactions. The variety and diversity of individuals also contributes to the creation and characteristics of the aggregate behavior.

If one person leaves an organization, the others immediately reorganize to fill the vacuum and the firm internally adapts to its new structure, often with some stress (and presumably some learning). As people move in and out of the organization, its global behavior may shift and change, adapting to its new internal structure as well as its external environment. This continuous flexing of complex adaptive systems keeps them alive and gives them the capacity to quickly change pace and redirect focus.

In the midst of all this change—and despite the need for the disequilibrium to adapt—most individuals and organizations have a tendency to seek stability. For example, emergent characteristics of an organization represent stable patterns that are qualitative and exert a strong influence back on the individuals and their relationships (Bennet and Bennet, 2004). Examples are culture, team spirit, attitudes toward customers, trust, consciousness, laughter, and individual emotions.

A typical organizational intervention is to require a specified series of actions done in a specific fashion to ensure a desired outcome. These directives may or may not be cohesive with the culture, or the way work is done. If the new procedures *are* consistent, they may well be fully adopted. Even when the new procedures are *not* consistent with the culture, when oversight is strong, employees may follow the steps of the process to the letter, at least for awhile. When management focus changes, or a management personnel change occurs, employees will slip back to earlier behaviors consistent with the culture. This phenomenon has been well-documented in the literature on management and culture (Forrester, 1994; Munck et al., 2002, Schein, 2004).

### **The environment and the knowledge worker**

With the recognition of knowledge as an organizational asset came the awareness that knowledge could not be “managed” but rather had to be nurtured (Bennet and Bennet, 2004), and that an individual could not be ordered to learn but could learn best only if they wanted to learn. Being pressured or forced to learn minimizes the learning rate because it creates a level of stress and fear that may significantly detract and reduce learning capacity (Jensen, 1998).

Simultaneously research in neuroscience has begun to validate that the human mind/brain co-evolves with its environment,

... endowing it with the flexibility to adapt to the environment it encounters, the experiences it has, the damage it suffers, the demands its owner makes of it. The brain is neither immutable nor static but is instead continuously remodeled by the lives we lead (Begley, 2007, p. 130).

What has been discovered is that the genes cannot be expressed (released to influence the cell) without some external influence outside the cell body. The implication is that humans can no longer assume their destiny is in their genes. This new field is called Epigenetics, the study of the mechanisms by which the cell environment influences gene activity. When describing this new area of research, Bruce Lipton, a cell biologist, asserts, “The belief that we are frail bio-

chemical machines controlled by genes is giving way to an understanding that we are powerful creators of our lives and the world in which we live” (Lipton, 2005, p.17). James Byrnes, an educator, suggests that the “neural organization of an adult brain is not set in stone at birth” (Byrnes, 2001, p. 171). Eric Jensen, an educator, takes the strong stand that, “... it is now established that contrasting, persistent, or traumatic environments can and do change the actions of genes” (Jensen, 2006, p. 10). Colin Ross, a psychologist, describes the causality in brain development as a “dance between two partners, DNA and the environment” (Ross, 2006, p. 32). As Lipton explains,

Genes are simply molecular blueprints used in the construction of cells, tissues and organs. The environment serves as a “contractor” who reads and engages those genetic blueprints and is ultimately responsible for the character of a cell’s life. It is a single cell’s “awareness” of the environment, not its genes, that sets into motion the mechanisms of life (Lipton, 2005, p. 15).

In short, research suggests that what we believe leads to what we think, and what we think leads to knowledge—the effective actions we take. Thus, what we believe and how we think determine what we do. It is our actions that primarily determine our success, not our genes (Bownds, 1999; Lipton, 2005; Rose, 2005; Begley, 2007).

This idea of cell awareness and learning as a dance between two partners lays the groundwork for exploring the personal action learning change model presented here.

### **The model**

Although change and adaptation is a natural characteristic of the brain, so is the search for safety, security and comfort. As people grow and live they develop and become comfortable with their way of working and will usually resist any external influence to change. This is what makes change management so challenging in organizations. Change is particularly difficult if it impacts who we are, our knowledge of our self-image. For example, you cannot successfully tell a knowledge worker to share their knowledge, trust others, be creative, or collaborate with their peers. They will only do these things if, and when, they decide to do them. So how can we get workers to change, or better, want to change? We offer that the following seven factors are instrumental in determining whether or not an individual will change: awareness, understanding, believing, feeling good, ownership, empowerment, and impact. For ease of exploring these factors, we will use the term “actor” to describe the individual we wish to embrace change.

First our actor must be *aware*. Awareness means that something has come into your attention; it has been mentally engaged. Attention is a cerebral phenomenon which the scientist Michael Posner hypothesized as caused by three separable but integrated systems in the brain (Medina, 2008). The first system is the Alerting or Arousal Network, a surveillance and monitoring system paying attention to the environment in the condition of Intrinsic Alertness (what would be the amygdala). When something unusual is detected, this Intrinsic Alertness transforms into specific attention or Phasic Alertness. The second system is the Orienting Network (what would be an increase in neuronal firings and connections with incoming information patterns engaged with an emotional tag), which uses the senses to gain more information about the subject of the alert. The third system is the Executive Network (engagement of the executive function in the frontal cortex), which is the stage where a response is—or is not—determined (Medina, 2008).

Focused on the significance of attention in the organizational setting, Thomas Davenport and John Beck break what they call the AttentionScape into six areas: captive attention (you pay attention, but resent it); voluntary attention (choice, and vulnerable to captive attention); back-of-mind attention (routine); front-of-mind attention (those things about which you are anxious or stressed); attractive attention (motivation); and aversive attention (negative incentives) (Davenport and Beck, 2001). Clearly the organizational setting will play a heavy role in determining which type of attention takes control, and thereby drives what learning will occur.

One part of the brain that *may keep individuals from paying attention* is the amygdala, the part of the brain where incoming sensory input is continuously screened for potentially dangerous situations. If a threat is sensed, the amygdala immediately sends a signal that sets in motion a quick action such as the fight or flight response before the cortex understands what has happened. As Zull details, when a threat is sensed, “our actions will not be controlled by our sensory cortex that breaks things down into details, but by our survival shortcut through the amygdala, which is fast but misses details” (Zull, 2002, p. 141). Inversely, Begley notes that attention, one of the parameters of successful learning, also pumps up neuronal activity. She says that, “Attention is real, in the sense that it takes a physical form capable of affecting the physical activity [and therefore the structure] of the brain” (Begley, 2007, p. 158).

Once aware, our actor must *understand* the actions driven by the research and the expected results that drive the need for change. Understanding includes the description of the situation and its information content that provides the: *who, what, where* and *when*. It involves the frame of reference of the actor, including assumptions and presuppositions. This can be referred to as surface knowledge (see the paper in this journal entitled “The depth of KNOWLEDGE: Surface, shallow or deep?") However, as systems become more complicated or complex, their behavior and characteristics change, requiring different approaches to understanding (Wilson, 1998; Bennet & Bennet, 2004). Chickering et al. (2005) says that where deep learning is necessary, we must create and re-create our own personal understanding.

In addition to awareness and understanding, our actor must *believe* that the actions are real and will work as assumed. Believing something means that the actor accepts what they are aware of and understands it is true and really exists. This believing involves beliefs, fundamental neural patterns which are associated with many other patterns and seem to dominate other patterns. They are central and strong patterns in the mind created by autobiographical experiences and closely related to emotions. Our beliefs significantly impact our attitudes, what we think about various subjects, and how we act. Thus believing that actions are real and will work is closely linked to our personal history of experiences.

Beliefs are frequently hidden from conscious thoughts and thereby can drive actions without the owner’s realization. Transformational learning is a common expression used for a strong disoriented experience that results in an individual realizing that their beliefs and underlying assumptions are no longer valid or appropriate for a given aspect of reality. When this occurs we typically have double-loop learning—a rapid shift in the frame of reference, the mindset or perspective of the individual relative to some experience.

Given awareness, understanding and believing, our actor must then *feel good* about taking the action. These feelings are what make the action important to the individual and worthy of their efforts. Zull (2002) considers emotions the foundation of learning, with the chemicals of emotion modifying the strength and contribution of each part of the learning cycle, directly impacting the signaling systems in each affected neuron. Similarly, Blackmore (2004) reminds us that reason cannot operate without emotions. Plotkin (1994) says that emotional content is

almost always present in verbal and non-verbal communication. We would push that even further.

All information coming into the body moves through the amygdala, that part of the brain that is,

... important both for the acquisition and for the on-line processing of emotional stimuli ... [with] Its processing encompassing both the elicitation of emotional responses in the body and changes in other cognitive processes, such as attention and memory (Adolphs, 2004, p. 1026).

As incoming information moves through the amygdala, an emotional “tag” is attached. If this information is perceived as life-threatening, then the amygdala takes immediate control, making a decision and acting on that decision before the individual is consciously aware of the threat! Haberlandt (1998) says that there is no such thing as a behavior or thought not impacted by emotions in some way. Even simple responses to information signals can be linked to multiple emotional neurotransmitters. As Mulvihill points out, because emotions are integrally linked with incoming information from all the senses, “it becomes clear that there is no thought, memory, or knowledge which is ‘objective,’ or ‘detached’ from the personal experience of knowing (Mulvihill, 2003, p. 322).

Unfortunately, even this emotional linking and sense of “knowing” may not be enough to initiate action. Our actor must also feel *ownership* of the action—a personal responsibility to act—and that he is *empowered* by the organization to take action, he has the right and freedom to take the action (self efficacy).

Knowledge empowers people. For purposes of this paper, empowerment is considered the investing of power, or to supply an ability, to enable (American Heritage Dictionary, 2006). Thus being empowered includes having *knowledge* of how, when and where to take the desired action. From learning theory, we know that individuals who *believe* they can learn, *can* learn (Lipton, 2005). Extrapolating this concept to empowerment, a person who believes they are empowered and can accomplish some task or worthwhile goal will have a much higher probability of success than an individual who does not believe they are empowered to do so (Bennet and Bennet, 2007). The value of empowerment lies simultaneously in the freedom and the responsibility given to individuals to accomplish something, and in the internal recognition of the personal capacity and capability to do so.

In organizations, empowerment may be a formal doctrine and policy or an informal expectation, trust and attitudes of managers and workers. With empowerment comes context knowledge, experience, and recognition of the scope within which empowerment applies. Where knowledge workers are concerned, empowerment is extremely important because it gives them the self respect, trust, and opportunity to make maximum use of their knowledge and competencies (Bennet and Bennet, 2007).

The final element is impact, what will happen if an action is taken and what will happen if it is not taken. Impact also includes the ability to perceive the effective outcome necessary to give the actor the confidence and motivation needed for success. If there is little or no impact, why should the actor bother to take action?

While these elements are not necessarily sequential, together they represent a *significant force for energizing action* and initiating change. Under some circumstances they can occur nearly simultaneously. For example, if you are walking past a swimming pool where a small child falls

into the water and no one else is around, you would almost instantly experience all of these elements and jump in to save the child.

### **Final thoughts**

In any change strategy, the challenge of management and leadership becomes that of communicating and collaborating with the organization's knowledge workers to create an environment, and an understanding on the part of their workforce, that all seven of these change factors are worthy of their consideration, acceptance and personal attention and actions. When this happens, change will come from a knowledgeable, motivated and supportive workforce.

Unfortunately, leadership and management often use the outdated approach of telling workers what they are expected to do and how they are expected to change. In these times of informed knowledge workers, this simply does not work. An approach that can work, and work well, is to let knowledge workers take the lead in selecting, creating and determining the changes needed throughout the organization. This empowerment and trust will then unleash the energy, knowledge and creativity of the workforce and, above all, they will have ownership. Through this approach, without realizing it, they will probably create their own personal acceptance of each of the seven change factors in the personal action learning change model. Paraphrasing Lao Tzu's description of the true leader, *Of a good leader, when his work is done, his aim fulfilled, They will say: We did it ourselves.*

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