Features

Innovation: Nature and Nurture?

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Since findings support both nature and nurture with no clear winner, we're left to make talent decisions with the assumption that the environment, which includes learning, can shape skills, knowledge and behaviors. As such, this provides a unique opportunity for the learning function to demonstrate bottom-line impact, both by developing skill sets around innovation and directly contributing to innovation through action-learning sessions.

About Innovation

In order to operationalize the nurture component within a learning context, we need to first understand the environment and ask why, what, who, where, when and how. Why does the corporation want to innovate? What is the definition of innovation? Who is sponsoring innovation? Where should we innovate? When should we innovate? How should we innovate? With the answers to these questions, the learning organization can be a powerful enabler for innovation in ways that may not have been fully realized in the past.

There are three basic areas where a corporation can focus innovation: product enhancements such as quality improvements or cost reductions, product extensions such as additional features or incremental functionality, and breakthrough or disruptive products. Of course, innovation doesn't have to be all about products. You can replace "product" with service, process, business model or market, as well.

Understanding where the corporation's strategy is focused is important to the learning strategy. What percentage of resources will be allocated to each of the three innovation areas? With this answer in hand, the learning organization can set an innovation learning strategy that enables the business' strategy.

What Is Innovation?

There are several conceivable definitions of innovation. However, the definition that works best for this particular discussion is "the process of transforming new and novel ideas into commercial value." What is especially attractive about this definition is that while it includes the necessary "new and novel ideas," it more importantly starts with "process" and ends with "commercial value."

Does your corporation have a definition? If not, the learning organization can have an instrumental role in defining it. How can we direct innovation learning solutions without it?

Who Is Sponsoring Innovation?

There will be senior leaders in the corporation who will act as the drivers of innovation, whether they're interested in initiating an innovation movement or trying to drive innovation themselves.

Recognizing these innovation sponsors across all functions (products, services, processes, business models and markets) and establishing a formal sponsorship-style relationship is critical to ensure the innovation learning strategy has the resources and authority to be executed.

Where Should We Innovate?

Innovation can occur anywhere across the business ecosystem: products and services, processes, business models and markets. Many times, the focus is narrowly placed on product technology, but phenomenal value can result from an innovative business model, as evidenced by Southwest Airlines' point-to-point model or Google's AdWords model.

Many times, organizations will determine specific focus areas where innovation is desired. With this information, the learning function has a unique vantage point across the multifunctional employee population to foster an innovation skill set and collaborative action learning targeted precisely where innovation will bring the greatest value.

When Should We Innovate?
Innovation can be difficult when it's pursued in an environment deficient of the right culture, processes, skills, tools and resources. Innovations require breakthrough thinking and instinct. Developing them requires a holistic mindset and flexibility. Implementing them requires collaboration across the corporation.

How mature is your organization's innovation environment? The learning function can have a pivotal role in assessing the knowledge, skills and behaviors needed, and driving a plan to put them in place, including partnering with sponsoring senior management and addressing the reward and recognition system within the culture of the organization.

How Should We Innovate?
In the simplest terms, innovation is a process that starts with investigating needs and follows with creating ideas, evaluating solutions and activating plans. Many times, innovation is seen as simply ideating. However, our definition, which concludes with "commercial value," reminds us that without action, there is no innovation.

Understanding the details of the innovation process, whether it is a formalized pipeline followed by a stage-gate process or a looser collaborative network, is a great opportunity for the learning function to align solutions that advance skills and even facilitate the process through action learning.

The Innovation Skill Set
Regardless of an organization's particular nomenclature, the essence of the innovation process can be summarized in terms of four distinct and fundamental stages: investigate needs, create ideas, evaluate potential solutions and activate plans. Each stage requires a different set of knowledge, skills and behaviors that collectively comprise a "whole-brained" thinking model (as seen in the Herrmann Whole Brain Model: analytical, imaginative, sequential and interpersonal). Note that the four stages are based on the four thinking styles.

• **Investigate Needs:** "Investigators" are analytical, logical and fact based. To ascertain needs, investigators ask good questions, listen to and hear what interviewees are saying, interpret materials and research, exercise great objectivity, see relationships, separate causes from effects, prioritize requirements, know when to stop investigating (that is, avoid paralysis analysis), have expertise in the chosen domain and its audience, and articulate needs in a way that stimulates great ideas.

• **Create Ideas:** "Creators" are creative, synthesizers, conceptual, holistic and artistic. To create ideas, creators ask good questions, have expertise in the chosen domain, see patterns and relationships where others might not, integrate thoughts and concepts, take risks, imagine and, as Theresa Amabile put it, have "intrinsic motivation."

• **Evaluate Solutions:** "Evaluators" are planners — they're organized, controlled and detail-oriented. To evaluate ideas, evaluators ask good questions, determine both qualitative and quantitative criteria, and understand who needs to make decisions and when. They drive the evaluation process in a way that best avoids hidden agendas and other unproductive behaviors.

• **Activate Plans:** "Activators" are action-oriented, talkative, emotional and interpersonal. To activate plans, activators ask good questions, determine who needs to do what and when, understand how to drive collaboration, create a motivating environment and usher in progress.

Nature or Nurture? It's Both!
Without a doubt, people are born with more ability in some areas than in others, yet we can all develop our effectiveness in each of the four innovation skill areas. Recognizing and aligning talent with jobs or innovation team roles is an obvious step. However, once in the role, knowledge, skills and behaviors need to be continuously honed. Not all talent will be at the same level of expertise. In the event that the talent is not available, "nurture" will take a greater role.

In the case of investigation, evaluation and activation skills, nurture can play a significant role. However, creativity is a combination of thinking styles, cognitive development, environmental influences and life experiences. While training and tools can improve creativity, various findings agree that "nurture" cannot create a creative person.

The goal is to be "whole brained." People are typically a mix of thinking styles: investigator, creator, evaluator and activator. While one of the four styles may be more dominant, most times there are at least one to two others in the mix that influence thinking style to a lesser degree.
Recalling that learning has three dimensions: education, relationships (feedback, coaching, collaboration) and experience, the learning function has the unique ability to enable innovation from a number of vantage points, including individual skills, team skills and manager skills.

Action Learning
While educational solutions can include classroom-based training, e-learning, books, articles, Web sites, conferences or workshops, action-learning workshops — in which people engage in actual innovating around a real goal, challenge or problem statement — provide some of the best learning for fostering innovation.

What might that workshop look like? Beginning with a brief interactive-thinking assessment exercise allows participants to identify their thinking styles. With this information in hand, diverse-thinking subteams can be formed, and people can later learn both individual and team techniques to increase their whole-brain thinking throughout the innovation process.

The workshop can be divided into the four stages with time allocations for each, dependent on the complexity and depth desired. In each stage, question banks are utilized to guide the participants through divergent exercises, with the goal of generating and developing lots of ideas.

The results of these divergent exercises all come together at the end of each stage, when a convergent exercise is used to identify the most productive ideas from that stage, which will become the basis for the next stage.

Stage 1: Investigate Needs: Participants use a question bank of "investigate" questions that brings them through a series of divergent exercises to generate lots of ideas, concluded by a convergent exercise to filter the ideas and hone in on top needs that will be used in the next stage for ideation.

Stage 2: Create Ideas: Participants use a question bank of "create" questions that brings them through a series of divergent exercises concluded by a convergent exercise to hone in on top ideas that will be used in the next stage for evaluation.

Stage 3: Evaluate Solutions: Participants use a question bank of "evaluate" questions that brings them through a series of divergent exercises concluded by a convergent exercise to hone in on top solutions that will be used in the next stage for activation.

Stage 4: Activate Plans: Participants use a question bank of "activate" questions that brings them through a series of divergent exercises concluded by a convergent exercise to hone in on top actions needed to achieve the overall goal.

At the end of a workshop such as this, participants leave with actionable ideas, as well as new tools that can be used for innovation ideation in their own jobs.

The goal, challenge or problem that is used in the workshop can come from the organization's innovation focus areas or strategies. It can be product, service, process, business model or market based. The output of the workshop can flow into the organization's existing innovation or stage-gate process.

Throughout the innovation skill set description, as well as the innovation process description, questions are key. Whether one is playing an investigative, creative, evaluative or activator role in the innovation process, the questions that are used to explore the stage are critical to the result. In fact, questions have long been known as the enablers of innovation. Albert Einstein said, "To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science."

The ability to "questionate" is a key skill for innovation. To "questionate" is to create, use and improve question banks. Question banks are organized collections of thought-provoking questions on a particular topic or focus area for the purpose of innovative application. Question banks capture the thought process, or intellectual capital, of many, for use by many.

With action learning, such as an innovation workshop, measures that quantify the contribution of the learning organization to innovation can be easily attained and communicated. To make it easy and client-driven, ensure return on investment or a comparable, meaningful measure is used in the evaluation criteria. Follow up after the innovation workshop and build success stories that can be communicated.

Most senior leaders understand the value of innovation and the culture and the skills associated with it. Middle managers typically understand it as well, but are challenged with prioritizing and operationalizing it in the context of day-to-day responsibilities. First-line managers, who direct the bulk of the workforce, are tightly caught between operational and tactical responsibilities and the need to allow time for workers to grow their skills, let alone innovate. How might the learning organization provide training, collaboration or experiential learning solutions to break through the time crunch experienced by front-line employees and supervisors?

Nature and Nurture
While the ageless debate continues around nature or nurture, the discussion will be made somewhat irrelevant by the fact that it has been shown that certain innovation skill sets can, in fact, be taught. The sooner a company takes advantage of its own internal innovative talent through development and proper job assignments, the sooner new products, services and business models can be brought to market. The learning organization is in a unique position to understand the organization's innovation strategies and

processes, and enable the skills and knowledge needed to move the organization's innovation agenda forward.

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