

Learning in Action

A guide to putting the learning organization to work

By David A Garvin

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This insightful book is meant to help companies understand how to leverage knowledge and make it a key corporate asset. The learning process involves acquiring, interpreting and applying knowledge. Author, David Garvin of Harvard Business School examines the challenges associated with each of these steps. He also explains how the three modes of learning, intelligence gathering, experience and experimentation can be effectively deployed. He examines the role leaders must play in making learning a day-to-day reality in their organizations.

From Individual to Organizational learning

Learning is the most natural of activities. It is an essential part of human experience. And it is a life long process, whether we recognize it or not. As individuals, we are motivated to learn to satisfy our curiosity, pass an examination, solve a problem or move on to a new role/career.

Though the importance of learning is widely acknowledged, many managers remain cynical. They look at learning as something of “questionable value” that diverts the attention of employees from “real work.” Learning is also viewed by many managers as something which releases human potential, not something which improves the bottom-line. Another point to be noted is that managers like stability and predictability. This is somewhat inconsistent with learning which encourages constant questioning and repeated reevaluations of established practice.

So learning has yet to gain a strong central position in many corporations. It occurs more through benign neglect than active support. Many managers regard time spent on learning as a necessary but unproductive evil. Garvin mentions that this is a very narrow view indeed: “Far from being academic, philosophical and inefficient, corporate learning is much more likely to be practical, applied and intimately linked to the bottom-line”. He makes an important point that organizational effectiveness must be viewed in terms of adaptability and flexibility, not by the usual short term measures of profitability and productivity. Learning can play a significant role in improving the adaptability and flexibility of organizations.

Garvin defines a learning organization as follows:

“A learning organization is an organization skilled at creating, acquiring, interpreting, transferring and retaining knowledge and at purposefully modifying its behaviour to reflect new knowledge and insights.”

The building blocks of this definition are:

- ☞ New ideas are essential for learning.
- ☞ These new ideas are sometimes the result of creative thinking
- ☞ In other cases, the ideas may come from outside the organization, from technical articles, knowledgeable experts or tracking studies
- ☞ Skills are needed to give meaning to raw data
- ☞ Knowledge must be shared across the organization, not limited to a privileged few
- ☞ There must be accompanying changes in the way work gets done.

Garvin mentions the “litmus tests” of a learning organization:

- ☞ Does the organization have a defined learning agenda?
 - Learning organizations have a clear picture of their future knowledge requirements.
- ☞ Is the organization open to discordant information?
 - Learning organizations are open to worrying information.
- ☞ Does the organization avoid repeated mistakes?
 - Learning organizations learn from past experience.
- ☞ Does the organization lose critical knowledge when people leave?
 - Learning organizations institutionalize essential knowledge.

Any company that is serious about becoming a learning organization must begin by answering three simple questions:

- ☞ What are our most pressing business challenges and greatest business opportunities?
- ☞ What do we need to learn to meet the challenges and take advantage of the opportunities?
- ☞ How should the necessary knowledge and skills be acquired?

Stages of Learning

For learning to occur, organizations must first acquire information, assembling facts, observations and data. The critical questions at this stage are:

- ☞ What information should be collected?
- ☞ From where should the information be collected?
- ☞ How should the information be collected?
- ☞ Who should collect the information?

Next organizations interpret information, producing perspectives, positions and refined understanding. The key questions are:

- ☞ What does the information mean?
- ☞ What categories should be applied?
- ☞ What cause-and-effect relationships are at work?

Finally, organizations use and apply information, engaging in tasks, activities and new behaviours. The crucial questions at this stage include:

- What new activities are appropriate?
- What behaviours must be modified?
- How can the organization generate a collective response?

Acquiring Information

Learning organizations should be able to separate signals from noise. Noise means confusing or random information that obscures the message. Another challenge in acquiring information is that people tend to be selective while receiving information. They do not attend to all information. To focus their attention, they amplify some stimuli and attenuate others, thus distorting the raw data.

Interpreting Information

Industry environments usually tend to be in a state of flux. Information is of limited value and becomes useful only when it is classified, grouped or placed in a larger context. While interpreting information, people rely on deeply rooted mental models/structures that organize knowledge and give it form and meaning. Interpretive frameworks must be tested and updated continually. These frameworks are invariably sketchy and incomplete and tend to be approximations of reality. In most cases, the underlying cause-and-effect relationships are difficult to specify. Supporting evidence is often fragmentary.

Applying Information

If an entity does not purposefully modify its behaviour to reflect new knowledge and insights, it does not qualify as a learning organization. Managers must translate their interpretations into concrete behaviours and must then assure that a critical mass of the organization adopts the new activities.

Learning Disabilities

A wide range of learning disabilities impede the Acquire-Interpret-Apply process. They are a by product of the way people think and act at every stage of the learning process.

- Acquisition problems arise from oversights, omissions and errors in the way information is collected. They result in slanted or incomplete data.

- Interpretation problems arise from distortions in the way that information is processed by pre existing frameworks. A large number occur because managers are imperfect statisticians and make flawed judgments about the likelihood and probability of events.
- Application and use problems arise from corporate risk aversion and the difficulties people have in recognizing that their actual behaviour often deviates markedly from their espoused behaviour.

When acquiring information, organizations suffer from three primary disabilities – *blind spots*, *filtering* and *lack of information sharing*. Blind spots arise when scanning and search activities are narrow or misdirected. Filtering occurs when critical data are downplayed or ignored because they do not accord with pre-existing schemes or frameworks. When information is not shared, it remains local and of limited utility.

Interpretation involves judgment and a certain amount of inspired guesswork. Both are easily swayed by factors other than logic or reason. Various problems include:

- a) Illusory correlation: viewing events as related simply because they have appeared together.
- b) Illusory causation: ascribing causality to events that occur in sequence and seem to be linked.
- c) Illusion of validity: increasing confidence in one's judgment especially with larger and larger amounts of information, even though the accuracy of judgment remains unchanged.
- d) Framing effects: different responses to identical uncertain payoffs that have been framed as potential gains rather than potential losses.
- e) Categorical bias: use and persistence of stereotypical categories for classifying people and events, even when faced with conflicting information.
- f) Availability bias: assessing the probability of events by the ease with which examples come to mind, rather than their actual frequencies or likelihood.
- g) Regression artifacts: ascribing causality to actions that change a variable from an extreme to an average level, even though the change is really due to chance.
- h) Hindsight bias: the systematic biasing of probability estimates towards actual outcomes.

In the third stage of the learning process, i.e., applying, the primary problem is an inability or unwillingness to act on new interpretations. Reasons include inertia and continued efforts to justify the past. People also tend to be risk averse. They do not like to experiment with unfamiliar, untested approaches.

Supportive Learning Environments

Supportive learning environments are characterized by the following:

- Recognise & accept differences: Differences are crucial to learning. Without differences, lethargy and drift are likely and prevailing frameworks will remain in place. It is important to have processes for bringing divergent points of view together and resolving the resulting tensions productively.
- Provide timely feedback: By compressing the learning cycle into a brief period and then coupling it with revised, updated information, organizations can more quickly assimilate new observations, can more easily compare predicted and actual behaviours and can more readily identify problems and disabilities.
- Stimulate new ideas: Effective learning requires a steady flow of new ideas. Some companies borrow ideas from outside. Others foster creative cultures that encourage employees to take risk and keep coming up with new ideas.
- Tolerate errors & mistakes: Employees must be convinced that the benefits of pursuing the new approaches exceed the costs. Psychologically safe environments have five distinguishing features: opportunities for training and practice, support and encouragement to overcome fear and shame associated with errors, coaching and rewards, for efforts in the right direction; norms that legitimize the making of errors and norms that reward innovative thinking and experimentation.

If learning is to occur, individuals must be comfortable, taking on the status quo. They must be encouraged and supported, especially when things do not happen as planned. Mistakes and errors are humbling but they can also be extraordinary teachers.

Intelligence

Companies need accurate, up-to-date information about the external environment. Intelligence is concerned with the selection, collection, interpretation and distribution of information that has strategic importance. Information can be gathered in three ways:

- Search – relies on public sources/documents and involves careful analysis & research. While doing search, companies must collect information from diverse sources, cross-check their findings to ensure reliability, devote enough effort to analysis and interpretation and link intelligence gathering with decision making.
- Inquiry – relies on interviews/surveys and involves framing and asking insightful questions. When the required data does not exist, inquiry is needed. There are two basic approaches to inquiry – descriptive and exploratory. Descriptive approaches involve precise, focused questions. Exploratory approaches use open ended

questions to understand the perceptions and needs of users. They involve unstructured interviews, suspension of judgment, keeping an open mind and listening empathically.

- Observation – relies on direct contact with users and involves attentive looking and listening. In some cases, even the most thoughtful questions will be ineffective. When knowledge is tacit, known only at a sub conscious or non verbal level, individuals will have trouble communicating clearly. Under the circumstances, direct observation becomes necessary.

Experience

Experience is the best teacher. Certain knowledge can be gained only by doing things, not by studying or talking about them. We learn from experience in two ways: repetition and exposure. Repetition helps us to perform the same tasks more efficiently over time. Exposure, on the other hand, ensures the addition of new skills by working in unfamiliar environments or by shouldering new responsibilities.

Both repetition and exposure operate in the background. Their lessons are often implicit and automatic. Much learning from experience occurs without conscious thought or control.

Surprisingly few companies take the time to reflect on their experiences. In case of one-off activities such as new product launches, geographical expansions or the introduction of unfamiliar technologies/processes, conscious reflection is usually necessary if lessons are to be learned. Managers must distinguish between what worked and what did not and disseminate this knowledge widely to people across the organization.

Reflection and review processes have a major weakness. They take place after the fact. In case of infrequent activities, immediate applications are hard to find and opportunities for practice are limited. Under such circumstances, the lessons of experience are easily lost. What we need is a well defined learning process where reflection and action are intimately intertwined.

Real problems motivate learners by putting them on the firing line. But programs built around real problems have some limitations. Failure is highly visible. Moreover, real problems are seldom designed for learning. They are selected for their importance and potential pay-off.

Simulated problems are designed with specific skills in mind and come in many forms. The best simulations combine realism, variety and low risk. An element of surprise is essential. An unexpected failure, for example, will force people to reflect on what happened and try out new approaches. Problems that stimulate learning are significant,

complex, multifunctional and involve difficult people issues. They are action oriented, ill structured and involve surprises.

Teams play a vital role in the learning process. They provide opportunities for pooling complementary skills, exploring new frameworks and sharing tacit, experiential knowledge. Teams can be of three types:

- natural teams that already exist, like a boss and his/her direct reports.
- peer teams that consist of individuals assembled on a one time basis for a particular program.
- diagonal slice teams that consist of a cross section of individuals drawn from a single organization.

Experiential programs involve a multitude of choices. Problems must be chosen with care, sessions must include a mix of concepts, applications and pauses for reflection. Incentives must encourage action. Senior managers must be assigned appropriate roles. Teams must contain the right set of participants. The process is time consuming but worth the price.

Experimentation

In case of unfamiliar concepts or unproven theories, the desired data may first have to be produced. When situations are novel, when experts disagree or when multiple alternatives exist, experimentation is often the only option. Experience provides little guidance when the state of knowledge is not well understood. Intelligence gathering does not produce clear cut results when experts disagree. Experience/intelligence gathering do not provide enough discriminating power, when plausible alternatives coexist. Under such circumstances, carefully constructed experiments are often the only way of distinguishing truth from fiction. Experiments can be exploratory, i.e, designed for discovery and hypothesis testing, i.e., to discriminate among alternative explanations and confirm prevailing views.

There are different stages of knowledge. They are the ability to:

- determine what is a good product or service
- define conditions under which the process gives good output
- measure key attributes using qualitative, quantitative metrics
- achieve repeatable performance
- mechanise a process and monitor it manually
- control exigencies and automate the process
- understand completely all aspects of the process.

Probe and Learn

This approach to learning has four critical elements: a starting point, one or more feedback loops, a process for rapid redesign and a stopping rule. Probe and learn can be

caused to generate knowledge in a variety of settings. The process is simple, straight forward, relevant and involves users under real-world conditions. But it cannot be used in settings that require continuous, error free operation. Probe and learn should also not be confused with unguided trial and error. The primary skill needed in probe and learn processes is the ability to create prototypes that are inexpensive and representative. They must be cheap and easy to modify, yet must be good approximations of the final version of the product or process.

Demonstration Projects

Explanation is especially difficult when large, complex systems are involved. Any number of things can go wrong. The probe and learn process can be used but the emphasis shifts from design to seeing how the system works under varied conditions, environments and behaviours. The associated experiments are called demonstration projects. These projects normally take one of two forms: online experiments, large scale simulations. Online experiments involve fully functioning businesses with real employees and customers. Simulations involve prototypical operations or systems, constructed of mockups or models.

Hypothesis Testing

This is different from exploration, being deductive rather than inductive. Experiments must satisfy two conditions. They must demonstrate with a high degree of confidence that a change in one variable actually causes a change in another. The results must also be generalisable beyond the experimental settings.

The author provides useful guidelines for hypothesis testing experiments:

- Be clear about the purpose of the experiment
- Reproduce real world conditions as closely as possible
- Manipulate a single variable at a time
- Use comparison groups or other natural controls
- Involve diverse, complementary observers
- Employ multiple, repeated trials

The Leadership Challenge

Galvin emphasizes that learning is different from teaching. Teaching puts the focus on the instructor. Teachers are the experts. Their role is to deliver content, communicate clear messages and insist better way of workings. Learning is quite different. New ways of thinking become the desired ends, not facts or frameworks. Questions become as important as answers. Pronouncements give way to debate and discussion. Success is measured by the degree to which students “learn how to learn.” Leaders become responsible for creating supportive environments, probing for insights and deeper

thinking and constructive settings where employees can collect, interpret and apply information.

Leaders must create opportunities for learning. They must create learning forums, assignments, activities and events whose primary purpose is to foster learning. Learning forums can also include systems audits, benchmarking projects and study missions to other great companies.

Leaders must shift from a pure performance orientation to one that balances performance and learning goals. When performance orientation is too strong, people evaluate themselves strictly in terms of their current ranking and results. They are likely to avoid difficult challenges, potential learning opportunities and situations where there is a high risk of error. People with a learning orientation on the other hand are prepared to take up challenges that broaden their portfolio of skills even if errors are likely. Over time, they gain both competence and confidence and their results improve. In short, a performance orientation ensures that people will work hard in order to look good. A learning orientation ensures that they will work smart in order to perform better.

Exploratory assignments provide a useful learning forum. Participants can be brought together around a common challenge and enough time and space set aside so that real thinking can occur.

Sometimes senior executives may find it necessary to put managers and employees through a learning process that mimics one that they have personally experienced. This way they understand the rationale and need for new behaviours.

Leaders must set the proper tone. They must encourage challenge and dissent and frame challenges in ways that encourage inquiry and foster a learning orientation. Leaders can do one of the following:

- tentative, partially developed proposals that stimulate discussion
- novel, unexpected questions that prompt new thinking
- changes in processes, procedures that introduce contrary, dissenting views

Challenge alone is not enough to generate learning. Individuals also need a sense of security if they are to discard old ways of thinking and acting. Fear of failure creates personal risk and vulnerability. A degree of security can balance this fear.

Open communication is also important. Top management must send clear signals that knowledge is to be shared, not hoarded. Leaders must reward individuals for knowledge sharing. They can redesign work processes, legitimizing knowledge sharing as a form of behaviour. They can impose policies and directives that require managers to seek help from others in order to complete their assignments.

Having shaped the climate, leaders must actively support the learning processes by leading discussions. They must raise good questions. Listening is also important. Leaders must not interrupt before others have finished speaking. They must not jump to conclusions assuming they have understood someone's position before receiving a full briefing. They must not project so much of their thinking into the conversation that the original message is lost. Leaders must also watch out for non participants and find ways of bringing them into the dialogue.

Without individuals who learn, there can be no learning organizations. To send the right signals, leaders need to develop their own skills as listeners. There are four main requirements here: *openness to new perspectives, awareness of personal biases, immersion in unfiltered data* and *a growing sense of humility*.

- Openness means leaders must accept the provisional nature of knowledge. Holy cows must be challenged from time to time. A good indicator of openness is the ability of top management to tolerate dissenting views.
- Leaders should also be aware of their personal biases and preferred learning styles and ensure that they fit well with the tasks at hand.
- Leaders must learn to deal with raw, unfiltered data. They must reduce their reliance on information that is prepackaged and highly compressed, making it difficult to interpret.
- Finally, leaders need to develop a sense of humility. They must recognize that they do not have all the answers. They must become skilled at defining the limits of their own knowledge.