

INDIVIDUAL AND ORGANIZATIONAL LEARNING

Learning Objectives

After studying this chapter, readers should be able to

- appraise the mechanisms and processes that allow individuals and organizations to learn,
- compare and contrast models of learning,
- evaluate the definition and purpose of organizational learning,
- discover the components and processes of organizational learning,
- realize that learning is a cycle that repeats,
- explain the barriers to individual and organizational learning, and
- explain the differences and similarities between organizational learning and a learning organization.

Key Terms

- Double-loop learning
- Learning communities
- Learning management systems
- Learning organization
- Organizational learning
- Single-loop learning

Learning has been defined as a change in knowledge that occurs as the result of experiences (Fiol and Lyles 1985). **Organizational learning**, then, is “an organizationally regulated collective learning process in which individual and group-based learning experiences concerning the improvement of organizational performance and/or goals are transferred into organizational routines, processes and structures” (Schilling and Kluge 2009, 338).

Learning can be achieved by gaining new facts and information; acquiring new procedures, processes, or skills; or establishing new routines and knowledge of action–outcome relationships (Argote 2013; Duncan and Weiss 1978). Learning is critical in healthcare, which is constantly evolving and continues to be challenged with patient safety issues. Change drives the need for learning, and learning allows the implementation of new knowledge and practices

to initiate change. Learning in healthcare must be a continuing function that occurs by both formal and informal means to produce the best possible outcomes for the organization and those it serves (Ratnapalan and Uleryk 2014).

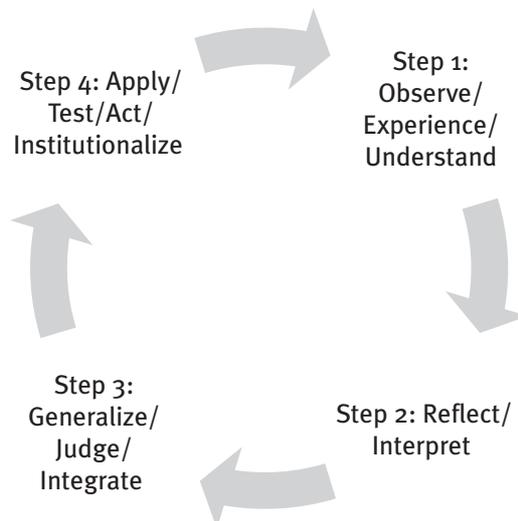
The following four processes constitute the act of learning in an organization (Schilling and Kluge 2009):

1. *Understanding*—gaining new insights and ideas based on personal experience
2. *Interpreting*—deducing relationships among insights, including the ability to explain the relationship to self and others
3. *Integrating*—assimilating new insights into groups to allow for collective action
4. *Institutionalizing*—implementing the shared understanding through organizational rules, procedures, and strategies

As this list implies, organizational learning also occurs at different levels in an organization: individual, group, and institutional (Crossan, Lane, and White 1999).

Because organizational learning processes are ongoing, learning can be seen as a cycle, as shown in exhibit 3.1. In step 1, people or organizations observe or experience an activity and gain understanding. The new understanding can be vicarious or personal, depending on whether it comes from training, news, interactions, or other means. The information is processed, interpreted,

EXHIBIT 3.1
The Cycle of Learning



Source: Adapted from Beard and Wilson (2006).

and reflected on in step 2, leading to generalizations and judgments in step 3 that allow integration of new insights. In step 4, actions occur that apply and test the generalizations and judgments made in the previous step to institutionalize the learning, which leads back to step 1, where the individual or organization again makes observations and gains experiences from its actions.

Argyris and Schon (1978) proposed that organizational learning can be either single- or double-loop learning. **Single-loop learning** occurs when employees search for solutions within the confines of given goals, values, plans, and rules. **Double-loop learning** takes place when the “governing variable” is questioned, causing shifts in strategies, values, or mission. Argyris and Schon (1978, 2–3) explained the difference as follows:

When the error detected and corrected permits the organization to carry on its present policies or achieve its present objectives, then that error and correction process is a single-loop learning. . . . Double-loop learning occurs when error is detected and corrected in ways that involve the modifications of an organization's underlying norms, policies, and objectives.

Of course, organizations are only a composite of individuals, and the type and degree of learning that transpire in an organization are only a reflection of the aggregation of all its employees and stakeholders. As a result, the term **learning organization**, having gained popularity in recent decades, is viewed differently from organizational learning. Organizational learning is a process, whereas a learning organization is a place in which ingrained structures and culture constantly facilitate and encourage learning (Malhotra 1996).

A learning organization purposely creates appropriate strategies and structures to enhance education and training. As a reflection of this concept's level of popularity, some firms now employ a chief learning officer, who typically reports directly to the CEO and is responsible for corporate training, development, and knowledge management. (The trend has even resulted in the creation of *Chief Learning Officer* magazine [www.clomedia.com].) Efforts to transform into learning organizations help companies transcend single-loop learning and produce creative solutions to position themselves for success today and in the future.

One of the early proponents of the learning organization concept, Peter Senge (2006), noted the presence of five main characteristics of learning organizations:

1. *System thinking*—understanding and analyzing how all the components of an organization influence each other within the whole to find and eliminate obstacles to learning
2. *Personal mastery*—individual commitment to self-improvement and the process of learning

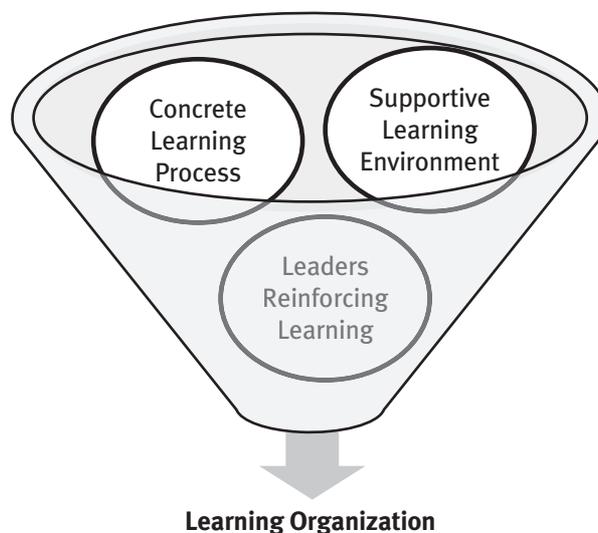
3. *Mental models*—assumptions held by individuals and the organization that promote learning through their culture and mind-sets
4. *Shared vision*—a common vision that stimulates learning
5. *Team learning*—group cohesiveness and dialogue that motivate common team learning

Garvin (1993, 80) further defined a learning organization as one “skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.”

For learning to be sustained, an organization needs a supportive environment that allows employees to disagree, ask questions, and take risks by providing a sense of psychological safety that eliminates fear of disagreement and failure, an appreciation of the differences among employees, openness to new ideas, and adequate time for thought and reflection (exhibit 3.2). Learning organizations also structure learning in a concrete way that identifies, collects, interprets, and allocates data for decision making and problem solving. Finally, such organizations hire and retain leaders who reinforce learning: Bosses encourage questioning and the voicing of alternative viewpoints, and they listen (Anderson and Escher 2010; Garvin, Edmondson, and Gino 2008).

Although these concepts may seem simple and logical, many organizations struggle to learn and often fail as a result. Many factors—personal, group, or organizational—can impede learning in organizations and include the following:

EXHIBIT 3.2 Components of a Learning Organization



Source: Adapted from Garvin, Edmondson, and Gino (2008).

Personal barriers:

- Personal biases
- Lack of motivation
- High degree of stress
- Lack of skills
- Deficit of trust
- Fear of punishment

Group and organizational barriers:

- Lack of clear goals
- Minimal feedback
- Strict work rules
- Excessive competition
- Blaming culture

Barriers to learning can have a profound impact on an organization's outcomes. As shown in the adjacent box, the behavior of the leader can dramatically influence the actions and learning behaviors of even very senior, highly trained individuals. One of the most destructive impediments to individuals' learning is being publicly embarrassed and shamed for mistakes. The old adage to praise publicly and punish privately remains an essential management strategy to allow organizational learning to take place.

The US Joint Chiefs of Staff Learn Not to Learn

In 1965, the Vietnam War was not going well for the United States. Assumptions regarding the way the war was being conducted were known to be faulty by many of the top generals, but many feared voicing their concerns. Finally, in November of that year, the members of the Joint Chiefs of Staff, the senior body of military officers who advise the president, gathered up the courage to meet with President Lyndon Johnson to call for a completely different strategy informed by their concerns.

President Johnson was not pleased to hear from them and did not offer them seats at the meeting. He sat while they stood in a semicircle and gave him their presentation. When they finished, the president turned his back on them for about a minute. Then he whirled back around and in an angry tirade screamed obscenities at the generals, both as a group and individually. He ridiculed them and told them to “get the h— out of here right now” (Ricks 2013).

The war continued on its blundering, bloody path and concluded only when the United States pulled out ten years later, after more than 58,000 US lives were lost and almost \$700 billion was spent (Barnes 2009).

Role of Motivation in Learning

People can be motivated to learn. Furthermore, certain motivation techniques have been shown to affect the amount of time individuals devote to learning (Bransford, Brown, and Cocking 2000).

Motivation can originate from both extrinsic and intrinsic sources. Extrinsic rewards are external incentives offered to encourage a certain behavior. As discussed in chapter 5, extrinsic rewards can be monetary, social, or organizational. Most changes in work activities and behavior require some amount of extrinsic motivation, as the work itself may not be inherently interesting. Companies often seek to motivate learning by giving external monetary and nonmonetary rewards to their employees. However, the primary reason people perform a behavior or an activity is that they feel valued by their social and work group (Ryan and Deci 2000), which constitutes intrinsic motivation.

Because much of the learning in organizations occurs in and through groups and not in a classroom setting, effective organizations structure learning opportunities in social contexts to take advantage of intrinsic motivational factors. They create a sense of community by developing norms for behavior and creating an emotionally safe environment to allow employees and supervisors to teach one another (Hammond et al. 2001).

Challenges of Learning in Healthcare

Organizational learning in healthcare is tremendously important today. Healthcare technology and complexity have grown and continue to rapidly evolve, as the rate of new scientific knowledge has exploded in the areas of genetics, proteomics, telemedicine, robotic medicine, and molecular biology. All medical professionals are struggling to keep up with knowledge that is often “fragmented, uncoordinated, and diffusely organized” (Institute of Medicine 2013). At the same time, they must be focused on those they serve.

Creating a learning healthcare organization can be a complex endeavor in that it demands instantaneous access to rapidly evolving knowledge (exhibit 3.3). Healthcare systems must also be able to digitally capture experiences of patient care, engage their patients in the learning opportunity, provide proper incentives to staff, allow full transparency, develop a culture directed by enlightened leaders, and offer training and system analysis that allow competency development.

Healthcare demands high quality and no failures to ensure the safety and well-being of patients on a daily basis. However, process failures in healthcare occur and recur far too frequently when learning does not take place. Nurses have been found to effect short-term fixes to processes that solve the immediate issue but fail to resolve the problem, which then recurs. For example, a lack

EXHIBIT 3.3

Characteristics
of a
Continuously
Learning
Healthcare
System

- Real-time access to knowledge
- Digital capture of the care experience for care improvement
- Engaged, empowered patients
- Incentives aligned to reward high-value care
- Full transparency
- Leadership-instilled culture of learning
- Supportive system competencies through training, system analysis, and feedback loops

Source: Adapted from Institute of Medicine (2013).

of clean linen may motivate a nurse to walk to another unit to borrow linen. This action may provide the needed linen but not solve the lack of adequate linen in the original location and may create secondary problems for other departments (Tucker and Edmondson 2003).

In some respects, learning in healthcare is more complicated than in other industries. The professionalism, functional organizational structures, and tight interdependencies that exist in healthcare create situations ripe for disaster unless diligence is practiced and learning takes place. For example, doctors and nurses are taught to make independent decisions and address individual patient problems. Their time is also very costly, so their organizations design their jobs to provide limited nonstructured time. Moreover, the work design often does not provide for an on-site manager to facilitate communication and activity across departmental boundaries, hindering problem resolution (Tucker and Edmondson 2003).

In addition, medical professional training programs have been designed to focus almost exclusively on clinical knowledge and minimize nonclinical learning, which occurs in training settings that often lack “self-reflection, dialogue, inquiry, and reciprocal communication” and result in healthcare providers who frequently find new learning difficult (Hoff, Pohl, and Bartfield 2006).

Some healthcare systems have developed **learning management systems** to formalize their learning processes. Southwestern Vermont Health Care, a small, not-for-profit health system located in Bennington, Vermont, uses a learning management system to “provide on-the-job support and resources . . . which reinforce the patient-centric culture.” (Healthcare Source 2014). The system is online, which allows ready access to employees and permits managers to rapidly communicate changes in policy and archive meeting results in a consistent manner.

Others, such as Bon Secours Health System, in Marriottsville, Maryland (see the adjacent box), have crafted **learning communities** to redesign and improve their patient care. Learning communities have been defined as “as a select group of potential adopters and stakeholders who engage in a

Learning Communities Spread Best Practices Across a System

Bon Secours Health System’s implementation of learning communities has helped the organization decrease infection rates by half and decrease the aggressive use of open-heart surgery by 45 percent. In 2007, Bon Secours, comprising 19 acute care hospitals in six Eastern states, began creating learning communities, each focused on a specific topic, to redesign its patient care.

The learning communities establish best practices that then become part of Bon Secours leadership’s performance expectations. Staying focused on what is important to patients, achieving measurable outcomes, persisting across several years, spreading what is learned, and institutionalizing accountability from the C-suite to the bedside have been key factors in the success of Bon Secours.

Source: Information from Butcher (2012).

shared learning process to facilitate adaptation and implementation of innovations. . . . Learning Community participants work together in an interactive group setting and leverage . . . resources to address a defined problem” (Agency for Healthcare Research and Quality 2016).

An organization can more easily embed learning if it adheres to the following tenets:

- Reinforce key concepts (e.g., key ideas introduced at meetings) through complementary online learning modules.
- Tailor education to specific needs, such as by addressing a unit’s particular learning needs through customized training.
- Give employees first-hand experience by using tools that allow hands-on training.
- Develop a safe environment in which learners may ask challenging, difficult questions.

A defining component of many organizational improvement movements is embedding learning as a primary work function. To be successful, Lean and other quality improvement approaches now extensively used in healthcare require an organizational culture that promotes learning. For example, Lean, which originated from the Toyota Production System, seeks to drive out waste and make all work add value. The approach is focused on a strategy of improving organizational processes by identifying the value desired by the user, examining each step in a process, and eliminating steps that do not add value. Lean and most other quality improvement programs require that difficult changes be made throughout an organization, as well as strong leadership and a culture that motivates learning and adaptation (Institute for Healthcare Improvement 2005).

Chapter Summary

Organizational learning has emerged as a critical operational element for businesses across the globe, especially for healthcare firms. It involves the collective application of individual and group experiences to improve company routines, processes, and structures. Such learning is critical in healthcare, with its rapidly growing knowledge base and existing concerns for patient safety. The learning process has four separate, cyclical processes that include (1) understanding, (2) interpreting, (3) integrating, and (4) institutionalizing. Learning can be either single-loop (where employees search for solutions within given goals, values, plans, and rules) or double-loop (where shifts in strategies, values, and mission may occur).

The concept of learning organizations has become popular, with some firms now employing chief learning officers. Learning organizations are characterized by their systems thinking, personal mastery, positive mental models, a shared vision, and team learning. Learning can be sustained only if a supportive environment exists, including a safe space in which workers are free to ask difficult questions, take risks, and disagree; leaders who reinforce learning are in place; concrete/structured processes are available for exploring new ideas; and adequate time is provided for thought and reflection.

Learning can be impeded by personal, group, or organizational barriers. If left unaddressed, barriers can greatly damage an organization's ability to adapt and learn. However, leaders can identify and reduce barriers and can motivate learning, in particular through social and group motivators.

Healthcare organizations must invest heavily in learning today, as clinical and managerial knowledge continues to rapidly expand. Successful healthcare firms are those that have processes and systems for knowledge dissemination and training while, at the same time, engaging their employees and patients in an atmosphere of transparency. This balance can be difficult to achieve in healthcare, which is more complicated in many ways than other industries because it involves professional training, interdependencies, and structures that make novel learning challenging. Some healthcare systems have developed learning management systems to formalize their learning processes.

Organizational learning is also a key component of most quality improvement programs that have proliferated in healthcare in recent decades. Lean is an example of an improvement approach that heavily uses learning concepts.

Chapter Questions

1. What is the difference between individual and organizational learning?
2. How does the learning process of integrating differ from institutionalizing?
3. How does the apply/test/act/institutionalize cycle lead to the observe/experience/understand cycle?
4. How could double-loop learning be disruptive to an organization?
5. Why are leaders' behaviors so important to organizational learning?
6. Of the three components of a learning organization, which do you think is the most important?
7. How do barriers to learning come to exist in organizations?
8. How does public punishment damage organizational learning?
9. Why is learning more difficult in healthcare than in other industries?
10. How is Lean quality improvement related to organizational learning?

Chapter Case

The Role of Information Technology in Healthcare Learning

St. James Medical System's CEO, Stephanie, knew her organization faced many current and future challenges. Diminishing reimbursement, potential restructuring as an accountable care organization, increased regional competition, and greater difficulty in recruiting and retaining skilled professional staff, among other factors, would make the next decade a transitional period requiring many innovative changes. Yet she questioned whether her organization was prepared to learn new ways to meet these challenges.

Stephanie recently read the Institute of Medicine's (2013) nearly 400-page report *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*, which indicated that the US healthcare system has squandered about \$750 billion per year—almost 30 percent of all expenditures—on unnecessary care, unnecessary administrative costs, and preventable health conditions while failing to deliver high-quality care. She was impressed by the Institute of Medicine's ten recommendations and thought about their ramifications for her organization. The recommendations were as follows (adapted from Institute of Medicine 2013):

1. *Digital infrastructure.* Increase the capability to capture clinical, care delivery process, and financial data to improve care and performance, and generate new knowledge.
2. *Data utility.* Simplify and revise research regulations to improve care, promote the capture of clinical data, and generate knowledge.
3. *Clinical decision support.* Accelerate integration of the best clinical knowledge into care decisions.
4. *Patient-centered care.* Involve patients and families in decisions regarding health and healthcare, tailored to fit their preferences.
5. *Community links.* Promote community–clinical partnerships and services aimed at managing and improving health at the community level.
6. *Care continuity.* Improve coordination and communication within and across organizations.
7. *Optimized operations.* Continuously improve healthcare operations to reduce waste, streamline care delivery, and focus on activities that improve patient health.

8. *Financial incentives.* Structure payment to reward continuous learning and improvement in the provision of higher-quality care at lower cost.
9. *Performance transparency.* Increase transparency on healthcare system performance.
10. *Broad leadership.* Expand commitment to the goals of a continuously learning healthcare system.

St. James had been working on many of these steps for years. It was constantly upgrading its information technology (IT) system, had developed clinical support decision systems, had spent the past five years trying to become patient centered, and at the same time had worked hard to lower its costs. Moving to a patient-centered care focus required a great deal of information gathering and learning, as encapsulated in St. James's four core concepts (adapted from MHA Keystone Center 2015):

1. *Respect and dignity.* Healthcare practitioners listen to and honor patient and family perspectives and choices. Patient and family knowledge, values, beliefs, and cultural backgrounds are incorporated into the planning and delivery of care.
2. *Information sharing.* Healthcare practitioners communicate and share complete and unbiased information with patients and families in ways that are affirming and useful. Patients and families receive timely, complete and accurate information in order to effectively participate in care and decision making.
3. *Participation.* Patients and families are encouraged and supported in participating in care and decision making at the level they choose.
4. *Collaboration.* Patients and families are also included on an institutionwide basis. Healthcare leaders collaborate with patients and families in policy and program development, implementation, and evaluation; in healthcare facility design; and in professional education, as well as in the delivery of care.

Trying to operate under these core concepts had been challenging, and Stephanie worried about the organization's ability to truly become patient centered without adopting many major changes. Just improving the speed and data capacity of the health system's IT infrastructure and electronic health record had been difficult; linking providers to streamline care continuity and providing financial incentives to reward continuous

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learning while running a transparent performance system seemed especially challenging. She decided to make a few notes and discuss the difficulties with St. James's executive team.

Case Questions

1. If St. James truly wants to become a learning organization and be prepared for the future, what does it need to do?
2. How can the organization increase transparency and implement an IT system that facilitates and improves decision making?

Chapter Activity

Either review the website of IDEO (www.ideo.com), a design and innovation consulting company focused on improving its own innovation and growth, or read the article on design thinking by IDEO's CEO, Tim Brown, published in *Harvard Business Review* (www.ideo.com/images/uploads/thoughts/IDEO_HBR_Design_Thinking.pdf). Identify three different learning processes and practices that the company uses. Next, view IDEO's video on the future of automobility (<http://automobility.ideo.com/>) and determine how a company could use these scenarios to improve its innovation and creativity.