*CHAPTER 10*

*Encouraging Competency-based Training and Development*

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# El 1: Building a Learning Culture

Everyone knows that some individuals are faster learners than others – they notice more things, they make connections that others miss, and they use that knowledge to act more quickly and effectively in tricky situations. In the same way, some organizations are faster and more effective “learners” than others. They anticipate changes in the environment, they are more sensitive to political trends and are able to more quickly mobilize the talents and expertise of their personnel to respond to challenges. They understand the “state-of-the-art” and can more quickly develop new programs and discard old ones without a great deal of training.

Peter Senge’s, best selling book, The fifth discipline: The art and practice of the learning organization, introduces idea of a learning organization that is self-designing and constantly changing because of new ideas and evolving needs. Participants “continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.”[[1]](#endnote-1) They are responding to ideas and technologies and are involved in team and organizational experiences where they can share in the vision of a desirable future. The organization does not need external agents (managers and trainers) to diagnose the training needs.

Learning organizations rarely go through crisis situations or traumatic changes involving mass layoffs or drastic shifts in vision. In the same way, learning people are more immune to crises requiring drastic shifts in careers and ways of living. Since learning organizations and people are constantly changing over a long period, they are much more in touch with their environment and survival and growth needs.

Discussions of the learning organization have often seemed utopian and futuristic as most organizations and people seem to require a considerable degree of human direction. Self-assembly and self-learning in organizations requires that we design systems which allow self-direction. However, this does not mean that should lose control of their organizations. Rather, it suggests that organizations are controlled by systems principles of adaptation and growth.

The learning organization is based on a simple truth that learning and growth are essential in adaptation and preservation. In conventional training, we might carry out a needs assessment to define and list the competencies and design a training program for being more creative, entrepreneurial, productive and quality focused and responsive to clients and customers. Developing a learning organization where these competencies flourish involve redesigning jobs and relationships to clients and customers within systems principles such as:

* Environmental Awareness and Sensitivity is when learning organization understands its external environment and is able to gather information and reacting in a timely fashion to the forces around it to learn and adapt.[[2]](#endnote-2) This also describes an organization and its ability to build constructive relationships with other organizations.
* Systems thinking is the ability to recognize relationships and how things influence each other. It is an approach to design which suggests that problems are really stresses or systemic adjustments and must be seen in a larger context. Rather than fixing a problem as an isolated part, understand the systemic context giving rise to the problem and how it can be resolved.
* *Personal Mastery* illustrates a special proficiency, like a master craftsman, through which a learning organization is able to continually turn out the results that matter most deeply. This is the heart of a learning culture as it is the ability to continually clarify and deepen one’s personal visions and focusing energy. Personal mastery begins by defining our lives by clarifying the things which really matter to us in living our lives, also in connecting personal learning to organizational learning.
* Mental Models. These are the “deeply engrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action.” [[3]](#endnote-3) Mental models might be simply beliefs that “people are untrustworthy,” or “employees need to be managed closely.” Failure to unearth mental models can make it difficult to encourage systems thinking because they impede learning and change. Systems thinking relies on mental models which encourage learning conversations which expose our mental models (assumptions and beliefs) and which construct a model, perhaps, which seeks to define the systemic relationships which enhance or distract us from our strategic priorities?
* *Shared vision* is the shared picture of the world we want to create. A vision is more than a vision statement that is has become all too common in organizations, a vision which could revolve around the key leaders or executives. A shared vision is developed by translating individual’s visions. It involves people and commits people because it is based on their values and what they are committed to. Individuals participate in a community and have a persona. They are cohesive and the vision provides a sense of identity.
* Team Learning. Teams are the fundamental learning unit in an organization and is where the “rubber hits the road” in learning. Team learning begins with dialogue and discussion in developing a capacity to think as a team. In dialogue, there is a free flowing exploration which involves listening to others in suspending one’s views. In discussion, different views are presented and debated. Team leaning involves dealing with the powerful group forces which inhibit productive discussion in working teams.

## Cybernetic Principles and Double Loop Learning

The concept of self-assembly and the learning organization is inspired by the ways that atoms, molecules, aggregates of molecules and components arrange themselves in nature. Entities as simple as a raindrop or as complex as a living cell arise from physical principles or instructions which are inherent in their nature. These principles suggest that nature requires that its many elements need to change, adapt, and revitialize themselves in response to new needs and requirements. No training necessary!

The metaphor of a learning system is the brain. “When our body heat rises, the brain and the central nervous system initiate action that leads us to slow down, sweat, and breathe heavily in order to initiate changes in the opposite direction. Similarly, when we get cold, we are led to shiver, stamp our feet, and attempt to increase out body temperature, keeping body functioning within the critical limits necessary for survival.”[[4]](#endnote-4)

The question of how do we design mechanical systems to be brain-like and capable of learning has been the concern of information theorists interested in artificial intelligence. The term cybernetics united a group of mathematicians interested in the study of information, feedback and control. Norbert Weiner, in the 1940s, used the Greek term kubernetes, meaning steerman or helmsman, as a metaphor to visualize the processes of information exchange needed for machines and organisms to self-regulate and maintain a steady course. The image might be one of helmsman using skills and judgment to control the direction of a sailboat in stormy seas.[[5]](#endnote-5)

The early applications were in the military in attempting to develop and refine devices to control gunfire. Firing a gun at a moving target, such as an airplane, illustrates the problem of steermanship in having to adjust the direction of the bullet to the speed and changing direction of the airplane. The core insight emerging from this early work was that the system could be designed for self-regulation depending on the information retrieval involving negative feedback. The idea of negative feedback is central to cybernetics. That is, if the helmsman shifts the boat off course by moving the rudder too far in one direction, the only way to get back on course is to detect the error and correct. For the helmsman, this is an automatic response, in the same way the robots in car industry can perform welding operations or the computer adjusts the speed and course of an airplane with the pilot intervention.

Cybernetics helped us define principles for communication and learning which are relevant to helping individuals and organizations self-regulate and adapt. [[6]](#endnote-6)

“Learning systems must have the capacity to sense, monitor, and scan significant aspects of their environment.

They must be able to relate this information to the operating norms that guide system behavior.

They must be able to detect significant deviations from these norms.

They must be able to initiate corrective action when discrepancies are detected.” [[7]](#endnote-7)

If these four principles are implemented effectively, there will be a healthy system of information exchange allowing for self correction and adjustment.

This is great if the norms don’t need to change. That is, in simple cybernetic systems like the thermostat, the system will adjust to the defined norms. It is unable to think or ask questions such as: Do we really want this temperature norm during the day, afternoon, night or when you are away on a holiday?

This question led modern cybernetics to draw the distinction between single loop (which make adjustment where the operating norms are set) and double loop learning (which allow for “double look” in questioning the norms). An example of single loop system is the thermostat as it has a governor to regulate the house’s temperature. Most complex systems like the brain have a double-loop capacity. The challenge of realizing the ideas of double loop learning are a “work in progress.” However, here are some principles to follow:

“Scan and anticipate change in the wider environment to detect significant variations.

Develop an ability to question, challenge, and change operating norms and assumptions.

Allow an appropriate strategic direction and pattern of organization to emerge.” [[8]](#endnote-8)

In implementing these principles, it is also important to: “Evolve designs that allow them to become skilled in the art of double-loop learning, to avoid getting trapped in single-loop processes, especially those created by traditional management control systems and the defensive routine of organizational members.” [[9]](#endnote-9)

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## How would you develop a learning culture?

Peter Senge became enthralled with the idea of the learning organization when Arie De Geus of Royal Dutch introduced him to a study, which concluded that the average life expectancy of a Fortune 500 company, from birth to death, was only 40 to 50 years. These corporations seemed to be constrained in learning, as they are unable to adapt and evolve as the world changed.

In the foreword to Arie de Gues book, The Living Company, Senge suggests that these learning disabilities might be connected to the machine-like assumptions we have about organizations. He contrasts this point of view with assumptions of a learning organization.

***Table 10.1 – Machine-like and living systems-like assumptions of organizations***

|  |  |
| --- | --- |
| If organization’s were machine-like. | If organizations were like living, learning systems. |
| They would be fixed, static where they are changes by someone else. | They would evolve naturally in response to the world around them. |
| They would have a sense of identity, vision, and direction is provided by builders. | They would have a sense of identity owned by participants. The organization would have a person hood. |
| Their actions and reactions would be based on goals and decisions made by management. | Individuals would have their own goals and its own capacity for autonomous action. |
| When company is run down, it would be rebuilt by management. | The company would be capable of regenerating itself from within. |
| Members are employees, or human resources standing in reserve waiting to take action. | The members in the organization are part of human work communities. |
| In training or assisting learning, we would focus on training individuals. The collective learning is the sum of individual employees. | We would focus training and assist learning by focusing on the entity, like a theatre troop, jazz ensemble, or championships sports team. |

There are several practical examples where learning organization principles have been successfully implemented. Examples include Revan’s original action learning design for business education and applications action learning at General Electric where teams were assigned projects and trainees were assessed on the usefulness of the project for solving key organizational problems. Different medical schools illustrate conventional subject-based curriculum vs. having students work in a problem-based environment and, in some universities, students carry out consultant projects (for a minimum fee) to link their learning to real problems.[[10]](#endnote-10)

What if the big bosses at the university said, “The old model of learning and training needs to be changed and we would like to apply learning organization principles in some of the classes. So, we might ask specific classes to answer the following questions to define how they would introduce these ideas.

## Your Task

You are asked to work with a small group of fellow students and use the following steps in defining and applying the principles of learning organizations.

Step 1. Define the assumptions of the learning organization and compare it with conventional “machine” assumptions of organizations. In doing this, complete the following sentences. A machine has characteristics such as \_\_\_\_\_\_\_\_\_\_. An organization based on machine-like assumptions would be like \_\_\_\_\_\_\_\_\_\_\_.

A living, learning entity has the characteristics such as \_\_\_\_\_\_\_\_\_\_\_\_\_. An organization based on living, learning assumptions would be like \_\_\_\_\_\_\_\_\_\_.

Step 2. Using table 10.1, define training and learning within machine assumptions (which we might assume are the assumptions that we as instructors currently use). How do instructors develop training and learning needs within these assumptions? What are major characteristics of the way that instructors would design the learning exercises? What are major characteristics of the way that evaluations are carried out?

Step 3. Define training and learning within living learning assumptions (which we might assume are the assumptions of a learning entity like a: theatre troop, jazz ensemble, or championship sports teams. What does it mean to be a living entity? How do instructors develop training and learning needs within these assumptions? What are major characteristics of the way that instructors would design the learning exercises? What are major characteristics of the way that evaluations are carried out?

# EL 2. Writing a Personal Application Memo (PAM)

The PAM helps to focus the concepts and ideas of the course readings to resolve real problems you face in your life and work connected to various parts of the course. The instructor can encourage a student to apply the experiential learning model to a course content and encourage student to complete a personal application memos (PAMs) focusing on unique questions. For example, during the course of 13 weeks, the student would complete a PAM after each session. Each PAM would focus on a key question in that session but allow the learner to handle it in different ways. For example, unique PAMs can be organized around sessions on motivation, working in teams, recruitment, selection, performance management, dealing with a supervisor, and so on.

In some classes, students might complete 10 PAMs for a total percentage of 40% of the grade. An option is to include only the top 8 PAMS, so each PAM is worth 5%. The student would get 10 points (divided by 2) for each PAM = 5%, 2 points for each of the sections and 2 points for the integration of the PAM in illustrating a logical flow from CE to AE. Negative points are given for PAM that are longer than 1 page and for lateness.

***Process.*** The student is introduced to the PAM model and is encouraged to focus in on one issue in each session. Alternatively, the instructor might define the question for the student to focus on in summarizing the class. For example, in a session on employee recruitment, the student might focus in on the question: how does a manager deal with the selection biases of different selection methods? Or, in a session on motivation, the question might be: How do I motivate a group of staff? In some cases, the student might wish to respond to a question that provoked him or her in an experiential exercise, such as a group’s inability to develop a consensus on how to motivate a group of staff.

The PAM exercise asks students to apply the experiential model in Figure 10.1 below. They should:

1. Think about a problem or issue they have confronted (concrete experience) or has been assigned to them;

2. Observe some of its implications (reflective observation);

3. Review the text chapter and develop concepts and principles for resolving it (abstract conceptualization); and

4. Come up with an action plan to resolve the situation you are faced with (active experimentation). In this way, the PAM encourages students to review the chapter with a purpose of resolving one important issue. Also, instead of being locked into one aspect of a learning style, the student experiences (and, hopefully, appreciates) all four phases of the learning cycle.

Figure 10.1: Experiential model

In writing the PAM, each section should relate to one part of the cyclical experiential model. The structure of the PAM has four parts.

1. CE: In the CE section, the task is to focus on a question. For example, assuming a class session on motivation, the issue might relate to an experience where you were not motivated in a job or an experience in a recent exercise in class). The student would be asked to describe an experience that has presented a problem for them related to motivation. Ideally, the experiences might be their own experiences, but they might also be a motivational experience they have observed in others. Or, there might be a concrete experience they felt in the class. Or, they might have read a newspaper article which highlighted the need for millennial people to improve their motivation in the new workforce which has global connections. In the CE section, there are two things to do: describe the issue. Then, the student is asked to describe his feelings and reactions to this issue. Each part gets a point in grading.

2. In the RO section, there are two parts where they are asked to note the observations of how others reaction. Also, they are asked to describe how they reacted.

3. In the AC section, they are asked to review the text readings and integrate this material with other information (examples, logic) to identify a set of principles that might be used to resolve your problem. They are asked to provide a reference and logic for your principles. A second part of this section asks them to identify ideas which might offer a different point of view?

4. The AE section asks people to define how they would apply the principles to resolve the motivational problem. This section part of the section includes a short action plan, that is, the steps you will take to do this.

The different parts to each section are reviewed in Figure 10.2 below.

**Figure 10.2: Format for Personal Application Memos**

**1. (CE) Concrete Experience — Issue and Feelings and Reactions**

1. I experienced a problem.  
The problem or issue involved . . .   
Give examples . . . .  
(e.g. Describe the critical incident. e.g., Millennial workers expressed a great deal of dissatisfaction in a case… in a newspaper…

2. What were your feelings?  
-I felt this way because . . .   
What were your reactions? . . .   
-I reacted by...

↓ ↓ ↓ ↓ ↓

**2. (RO) Reflective Observations — Observations of What You Saw**

1. When the situation occurred, I noticed that other people.... . . .   
(e.g. In one case, employees went on strike....)

2. My reactions to this issue were (describe what you did) . .

↓ ↓ ↓ ↓ ↓

**3. (AC) Abstract Conceptualization — Your set of Principles for Future Action**

1. The readings illustrate certain principles supported by evidence to illustrate... . . . (Each principle should be defined and supported with logic and references).

2. There is other evidence (cite the literature) . . .

↓ ↓ ↓ ↓ ↓

**4. (AE) Active Experimentation — Future Action**

1. In resolving this problem, we need to respond to certain issues which might be useful in addressing the lack of motivation  
issue. (OR) I have identified certain concepts/principles that might be useful in resolving this issue.   
Give logic (rationale) and literature support.

2. In implementing, there are certain steps…. .

***Note to the student in writing a Weekly PAM***

The PAM is a one page application memo which implements the experiential learning model. During the course, you will be asked to complete several PAMs to illustrate how you would apply the course reading in resolving specific HR issues.

It may seem that one page is not long enough for some of the PAMs, but the length has a specific purpose of focusing your energy. The rules are that you can use any font (but not less than 10 point) or style to get it onto one page.

Ideally, the issues should be important to you, either because you observed or experienced something which is disturbing or which will affect you. Examples of issues include:

1. How do you involve identify skills to focus your training?

2. How do we avoid excessive executive compensation at Nortel?

3. How do we motivate people during a performance review interview?

4. How do I improve my chances of being selected for a specific job?

Some people begin by thinking of a problem or issue they are currently experiencing or have observed in the newspapers (such as excessive executive compensation) that relates to a section in the chapters in the text. In a class which uses experiential exercises for each session, you might be instructed to write a PAM based on an experience in the session. You might then complete the statements in the CE section. Some people are more comfortable beginning with the RO section. Complete the sentences in each section (see PAM format example), making sure you provide logic, examples, or literature (i.e., text) evidence where appropriate.

***Sentence Beginnings as a Quick Guide for Writing Each Section of the PAM (Personal Application Memo)***

The PAM problem solving process includes the steps of: (i) identifying an issue, defining your feelings and reactions, (ii) observing, (iii) developing principles or ideas for responding, and (iv) developing a plan for responding. The structure is important. It suggests that we have to become clear on the problem or issue you experienced first. Then, follow the steps.

We think it helps to begin each section of the PAM with the following sentence beginning. The sentence beginnings are in red. Begin each new section with a new paragraph

Note: Please Pay close attention to the sample structure for your PAM and the content required to complete the exercise. This sentence beginnings helps to guide each step.

1. (CE) Concrete Experience — Feelings and Reactions

1. I experienced a problem related to \_\_\_\_\_\_\_\_\_\_\_\_(e.g., executive compensation and bonus of university presidents, when you were mystified about this issue and how managers might resolve it). Then, describe the background and information to support this statement and illustrate it.)

1. (CE) Concrete Experience (Feelings and Reactions)

2. I felt (e.g., Frustrated )

(Then, provide background and information to support this statement and illustrate it)

I reacted (e.g., I became quite angry and expressed my feelings to my instructors and friends....)

(1Point)

(Then, provide background and information to support this statement and illustrate it)

(1Point)

2. (RO) Reflective Observations — Observations

1. When the situation occurred, I noticed that (e.g., other people as quoted in the newspapers (shareholders, former employees, politicians) indicated their disapproval and why.

(Then, provide background and information to support these statements and illustrate it)

(1Point)

2. This became apparent when they .. . .   
This occurred when . . .

(Then, provide background and information to support this statement and illustrate it)

(1Point)

3. (AC) Abstract Conceptualization — Your Principles or Ideas from the Text which are Specification Relevant

1. The readings illustrate certain principles are ideas which illustrate how to overcome my ability to resolve problems.

Principle1: The literature illustrates that “Compensation should be structured to account for the time horizon of risks..... Performance should be measured by... (Then, summarize the text information to support this) . (Text, pp. 168-175).

Principle 2: The literature suggests that Golden parachutes and supplemental retirement packages should be examined .... (Text, pp. ).

Principle 3: The literature also suggests that there should be greater transparency, independence and accountability of compensation committees from executives in the organization.... Then, summarize the text information to support this) . (Text, p0.

(1Point)

2. There is other evidence which illustrates other ways to resolve this issue and that might illustrate a different point of view (cite text) . . .

(1Point)

4. (AE) Active Experimentation — Future Action

1. Based on the literature, I have identified that certain principles or ideas might be useful in immediately resolving this issue and issues like this.   
Then, summarize the text information which is most relevant and give you logic for using it. (Text, pp. ).

(1Point)

2. In implementing when I face similar problems or issues as I have described here, I will take certain steps which include:

Then, summarize the steps you will take in a 1, 2, 3 fashion and provide some detail about each step and its importance. (1Point)

8 Points PLUS 2 Additional points for Cohesiveness and integration of your analysis.

**Steps to Writing The PAM**

1. Define a specific problem or issue. Ideally, you’ve personally experienced the problem and can do something about.

2. Complete each section of the PAM. (Begin by completing the sentences in the example of a PAM format included in this section.) Each section should be subdivided so that separate paragraphs are reserved for each point.

3. Provide depth in your answers. Use examples, logic, and readings for support.

4. Make sure each section of the PAM is integrated, that is, related to each of the other sections.

5. Make sure your AE (action plan) section requires suggests that something specific and immediate can be done to resolve the problem. It might also identify benchmarks to judge your effectiveness in resolving this problem.

6. If possible, develop your own principles or theories that can be supported by the readings.

The grading of the PAMs is based on the above criteria and on your ability to problem-solve in a practical way.

***Example of a PAM – Training and learning***

**CE) Concrete Experience**

* I experienced a problem related to change in the workplace. I had been working in the government around two years as a court reporter when the legislation surrounding young offenders changed, affecting the way youth court records were stored and transcripts were prepared. When this legislation came into effect we received no notice and no training or training documents to help us learn what we needed to know.
* -I felt frustrated by management’s lack of support during this time of change and was not sure what to do. I felt frustrated because I was not being given the opportunity to learn what I needed to do in order to do my job properly and I felt scared that if I made a mistake in preparing my transcripts or storing the records that I would be fired. I felt angry because noone was able to help me to even find the right path to learn what I needed to know.
* **-I reacted by asking my colleagues for information regarding this change and if there was any avenue I could take in order to learn what I needed to know on my own. I spoke to my supervisor to see if there was anything that he could tell me about the new procedures. I also reacted by not preparing any transcripts until I was clear on the new rules. Even though I was bound by timelimes I felt it was more important to hold transcripts back until I was sure they were being done correctly. I reacted in a bitter and resentful way because noone was helping me to learn, I made a poor decision not to share information the next time I had it and someone else did not.**

**(RO) Reflective Observations**

* -When the situation occurred, I noticed that the other reporters were not being very helpful. It was clear to me from watching them prepare their own transcripts that they were aware of the new procedures but did not want to share the information. I saw the manager and supervisor taking time to teach other court staff, not reporters but clerks, the new procedures as well as refusing to answer any questions that were being asked by other reporters.
* -This became apparent when to me when I was scheduled to work in the office one day, I was able to observe other reporters who were as confused as me looking to more senior reporters for assistance. The senior reporters would comment that they were just as confused but they were preparing their transcripts in a different way.   
  This occurred about one month after the new legislation went into effect, I was able to see the manager and supervisor providing the court clerks with hand-outs that had information that related to their role. When I asked for more information myself the manager said he did not have anything for court reporters, that we were on our own.

**(AC) Abstract Conceptualization**

* -The readings illustrate certain principles which describe how to manage change in a positive way. There are two principles which fall under institutionalizing the vision category in the literature that I found relate to the problem I was having regarding change in the workplace.
* -Principle 1: Turn students into teachers is defined as being “given opportunities to teach others what they understand the positive change to be” (pg566). This principle means that each person learns about the change, interprets it in their own way, and relates what they know to other people. Relating to my circumstance, this would have been a good principle because even one court reporter being shown what the new procedures were, or even where to go to learn them, could have taught that information with everyone else.
* -Principle 2: Build human capital is defined as “people throughout the organization having developed the capability to lead the vision themselves, to institute positive change, and carry on under their own initiative.” (pg567). This means providing training and development opportunities and encouraging the formation of networks. This principle would have been helpful so that future court reporters could learn what they needed to know in order to do their job. Not only being taught the mechanics of the position but why they were being asked to change the way youth records were being dealt with would have been important.
* -There is additional evidence which illustrates other ways to resolve difficulties with change and that institutionalizing the vision is not the only step in the framework of positive change. The step of establishing a climate of positivity is another way to help manage change effectively and this is done first through creating positive energy networks and ensuring a climate of compassion, gratitude and forgiveness. Creating positive energy networks means surrounding yourself with people “who strengthen and create vitality and liveliness in others” or are positive energizers (pg549).
* -This would be helpful in the situation I faced because there were a number of naysayers who commented only on the negative side of the new reporting processes, such as how much time things would take and that it would add to their workload. Ensuring a climate of compassion, forgiveness and gratitude means exactly that, maintaining an environment where mistakes are learned from, people are grateful to have help and opportunities to learn and grow. This would have been helpful in my situation when I was angry with management and my colleagues for not sharing what they knew. Resentment and bitterness developed where I should have been grateful and compassionate to learn new things and have the opportunity to develop my skills.

**- (AE) Active Experimentation**

* -Based on the literature, I have identified that certain principles or ideas might be useful in immediately resolving this issue and issues like this. The most useful information that relates to my situation is in institutionalizing the change (pg 566). Turning students into teachers and building human capital is key in ensuring positive change occurs. All steps in the framework for leading positive change are essential but in my situation, where there was only implementation to do, this step was the most relevant.
* -When I am faced with a similar situation in the future as a manager I would communicate the required changes better. I would first learn what is required myself and then teach that information to one or two staff who I would then ask to teach the rest of the team.  **By learning what is required I can interpret the information, share what is necessary in a way that makes the change more palatable, as opposed to saying nothing because I either do not understand or I do not want to learn.**

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