



## Chapter 5

### Summary of Research, Implications, and Recommendations

For the purpose of developing a learning organization model via HRD unit as an extension of higher educations, the researcher has summarized the results according to the objectives, scope of the study, a conceptual framework of the study, research procedures, research findings, implications and recommendations as follow:

#### Objectives of the study

1. To study and analyze theories, principles and practices regarding a learning organization
2. To develop an appropriate learning organization model for Human Resource Development in Thai organizations.
3. To test the validity of the model by a case study of Thai Airways International Public Company Limited via Human Resource Development (HRD) unit.

#### Scope of the study

This study is aimed at helping HRD units as an extension of higher education to assess the effectiveness of Thai organizations as learning organizations. Two types of organizations have been looked at, service enterprises and educational institutions.

1. Service enterprises have been further categorized into 2 sub-sets
  - Thai public and private enterprises
  - Multinational private enterprises

2. Thai higher education institutions as service organizations have been further categorized into 2 sub-sets

- Public institutions
- Private institutions

## **A Conceptual Framework of the Study**

**Figure 1** in chapter 1 shows a conceptual framework in developing a learning organization model via human resource development. (Human resource development, as a change agent or as a catalyst to initiate changes.) Theories and concepts of a learning organization for Thai culture and the role of human resource development units must be clearly understood and integrated in order to develop a learning organization model. In developing a learning organization model, HRD functioning as a change agent is necessary. The role of HRD is to encourage and facilitate learning in every direction of the organization, top down, bottom up, crisscross, side by side and as partners as well. As a catalyst, the HRD professionals must initiate and be able to manage change competently. They must recognize the need for change, champion the change and enlist others in its pursuit, and model the change expected of others (Goleman, 1998)

## **Research Methodology**

This research employs and mixes qualitative and quantitative methodologies. This study aims to develop a learning organization model that is applicable to Thai organizations. The process is divided into three stages as follows.

Stage 1. Documentary Research

Stage 2. Process of Model Development

2.1 Instrumentation

2.2 Sampling Design, Data Collection and Analysis

2.3 Conceptualization of the Model

Stage 3. Model Testing to a Case Study

### 3.2 Pre – test and Post – test as a Case Study

### 3.3 Case Study Report

## Research Findings

The results have been summarized into three parts :

### **Part 1 Analysis of Theories, Principles and Practices of Learning Organization as Related to HRD as a Change Agent**

The analysis of theories, principles and practices from the documentary research of the 12 sub-systems as related to HRD as a change agent are:

**Vision and Strategy:** It is a prerequisite for a learning organization to have a clear direction.

**Executive Practices:** Continuous strategies alone are not sufficient to create a learning organization. Executives must model the behavior which they desire for their employees.

**Managerial Practices:** Managerial practices must support the vision and strategy of a learning organization. Managers provide a key link between executives and employees. They can directly influence the way in which strategy and resulting business are implemented.

**Climate:** Strategies are needed for creating a faster learning climate. Supportive atmosphere is needed to enhance a corporate climate for continuous learning.

**Organizational and Job Structure:** It is necessary for an organization to reengineer policies and structures to support learning. Strategies are needed for team mixing and job rotation to maximize knowledge to transfer across the organization.

**Information Flow:** The ability to learn faster becomes significant as well as the ability to cooperate become more knowledge-based. Technological networks and information tools must be integrated in order to allow access to and exchange information and learning.

**Individuals and Team Practices:** Individual and team practices must openly discuss the issue and work toward solutions together. Cross-functional teams are beneficial and conducive to a learning organization. It helps to minimize blame, fear and conflicts throughout the organization.

**Work Processes:** Work processes which enhance learning organizations should incorporate systematic problem-solving techniques, allow experimentation and approaches, encourage learning from others and promote a systematic view of the organization. Single-loop learning works well in most ordinary situations and when assumptions about cause and effect are correct. Double-loop learning is needed when expected results are not achieved.

**Performance Goals and Feedback:** Performance goals and feedback from internal and external customers are necessary in order to meet their needs and focus the learning in the right direction for performance improvements.

**Training and Education:** Training and education must support the principles of organizational learning. New knowledge or insights have potential to influence behavior and thus behavior change leads to improved performance. A shift in thinking of HRD practitioners is required to facilitate more self-discovery and learning for employees to become flexible, adaptable and think independently to cope with high levels of ambiguity.

**Rewards and Recognition:** Supportive managerial practices and climate will enhance employees to take risks. Mistakes or failures will be viewed as learning opportunities. New ideas should be encouraged and recognized.

**Individual and Team Development:** An organization's success also depends on individual and team development. People need to grow and develop continually. Training is developmentally conceived to enhance the problem-solving capacity of the organization through individual and organizational self-development. Organizations need to support individual and teams through high quality development plans which include formal and on-the-job learning opportunities.

## **Part 2 Process of Model Development**

A summary of the research findings includes the respondents' profiles, the findings relating to the 12 sub-systems of the organization and the individual characteristics that support the development of a learning organization.

### **2.1 Respondents' profiles**

There were a total of 303 respondents in the study. The biggest group was male 170 (56.1%) between the age of 36-40. Most of the samples were married 221 (72.9%). The majority of the samples had a Master's degree, 135 (44.6%) The largest group were middle managers 143 (34.3%), 199 (65.7%) were Thai enterprises and 104 (34.3%) multinational enterprises. Thai enterprises that were public was 59 (29.6%) and private was 140 (70.4%) The largest samples have work experiences between 1-5 years, 96 (31.7%) and the second largest samples have work experiences more than 20 years, 79 (26.1%).

### **2.2 Summary of the Survey's Results Regarding the 12 Sub-systems**

The results from the questionnaire regarding the 12 sub-systems are analyzed according to the following categories:

- Comparison between the current reality and future possibility, for all the organizations' 12 sub-systems shows that executives practices are the highest for the future possibility.

- Comparison between Thai and multinational enterprises of current reality and future possibility illustrates that executive-practices are the highest mean for multinational and Thai enterprises in current reality. For future possibility executive practices are the highest mean in Thai enterprises while information flow is the highest mean in the multinational enterprises.
- Comparison between the public and private sectors in Thai enterprises regarding current reality and future possibility indicates that executive practices is the highest mean for both private and public sectors in the current reality. For future possibility, vision and strategy, and practices are the highest mean for public sector and executive practice is highest mean for private Thai enterprises.
- Comparison between the three managerial levels-top, middle, and first-line-regarding current reality and future possibility show that executive practices are the highest mean for all three managerial levels. For future possibility, vision and strategy is the highest mean for middle and first-line managers while for top managers, executive practices are the highest mean. The total means of the 12 sub-systems for all the three managerial levels are higher for the future possibility than the current reality.

In conclusion, executive practices are the main focus for the current reality in Thai and multinational enterprises, and in the private sector. For Thai enterprises and for all three managerial levels-top, middle and first-line-vision and strategy are the main goals for the future. Information flow is the top priority for multinational enterprises.

Another aspect, which the researcher intended to survey, is how much the Thai characteristics are related to the development of a learning organization. Results from the overall respondents show 15 characteristics that are deemed as being very Thai. Among these characteristics, 3 of them can be seen as very

supportive to the development of a learning organization. There are also 4 characteristics that are not supportive.

The following describe Thai characteristics and characteristics that are supportive and non – supportive to the development of learning organization identified by the overall respondents.

The Thai characteristics identified by the overall respondents are:

- Rarely plan ahead especially in long range, play it by ear
- Centralization is popular
- Instructions are sought and responsibility is avoided
- Indirect or circuitous
- Sensitivity is valued
- Attribute failure to outside forces
- Dislike initiative, failure is stigma
- Do not disagree to keep harmony
- Short-term oriented, focus on past and present
- Responsive to situation-opportunities

Three Thai supportive characteristics identified by the overall respondents are

- Responsive to situation-opportunities
- Purpose of education is learning how to do
- Sensitivity is valued

Four Thai non - supportive characteristics identified by the overall respondents are:

- Centralization is popular
- Dislike initiatives, failure is stigma
- Instructions are sought and responsibility is avoided
- Indirect or circuitous

### **Part 3 Model Testing through a Case study**

The researcher has designed a learning organization model via an HRD unit and tested the model through a case study. It was a Transformational Leadership course conducted in Phisanulok at Sappraiwan Resort for 2 1/2 days facilitated by Dr. Pornchulee Achava-Amrung. The objective of the course was for participants to improve themselves at physical, emotional and intellectual levels. For an organization to develop, there must be sensitive leadership which inspires people to give their best. When leaders show that they are beginning to change for the better, others are energized to improve their own way of working. There were 24 participants in the course.

A pre-test and post-test was given based on three questions. The content was analyzed to measure the knowledge and attitudes of the participants. The concept of the five disciplines of Senge - shared vision, system thinking, mental model, personal mastery and team learning - was introduced. Leadership competencies were also measured. There were significant differences in the pre-test and post-test except for the participants' awareness of the concept of team learning.

In the pre-test, participants understood the concepts of team learning. In the post-test, participants' knowledge and attitude changed greatly. There was an awareness of a paradigm change in oneself.

After the course, participants were also able to identify more Thai characteristics that support the development of a learning organization. The characteristics they identified were similar to the three most supportive Thai characteristics cited in this researcher's survey.

#### **3.1 Strategies for Building a Thai Learning Organization**

The Results from the survey and the case study have shown that a paradigm shift is needed for individuals, especially leaders. The concept of Senge's five disciplines is most appropriate to change a person's paradigm, as demonstrated



in the case study, in order to improve employees “mental mode”, including leaders. According to Chalofsky (1992), human resource development is the study and practice to increase the learning capacity of individuals, groups and organizations through the development and application of learning-based interventions for the purpose of optimizing human and organizational growth and effectiveness.

To successfully implement a learning organization, new ways of learning are needed. The following are some guidelines made by Kramlinger (1996).

- Everyone can be a source of useful ideas.
- The people closest to the problem usually have the best ideas.
- Learning flows up as well as down in the organization.
- Nothing is sacred (except the governing vision and values).
- The process of open dialogue improves ideas.
- The more information people can access the better.
- New ideas are valuable.
- A mistake is simply an opportunity to learn.

It is for top management and HRD professionals to develop policies and procedures that support these guidelines. Some of these learning principles can be incorporated into the organization’s strategies and principles in executive education, communication technology, and empowering employees.

**Executive Education:** Senior management needs to put dedicated effort into learning. A learning laboratory can test their “mental models” for making decisions. These laboratories often focus on systems dynamics and the long-term implications of making decisions. The program may include a computer-assisted business simulation that allows executives to study the sometimes-disastrous consequences of their decisions without sinking the real ship.

**Communication Technology:** Computers and other communication technologies have had a massive impact on organizational learning at all levels. On-line database can give everyone in the organization instant access to important information

that allows him or her to solve problems as they occur. Giving employees more access to information promotes widespread learning.

**Empowered Employees:** Another way that organizations learn is through empowered employees. To respond quickly to change, employees are asked to think for themselves and take action to solve problems. More and more task forces process improvement teams and self-directed work units are being given responsibility for innovation and improvements as well as the authority to act upon what they learn.

### **Seven Steps for Building a Learning Organization via HRD Unit**

For brain-based learning to work, the approach must be for long-term, personal, systemic and organizational change. Jensen (1996) suggested the following seven steps to transform an organization into a learning organization:

#### **1. Assess the Existing Learning Culture**

This can be done both formally and informally, individually as well as organizationally. It should be safe for others to tell the truth about their organization. Through discussion and genuine dialogue, there can be an understanding of the mental models of each employee; these are the paradigms that shape their decision-making on a daily basis. They can find out how they think the system works, how to present or to learning how to work properly.

#### **2. Build a Collective Vision**

This can be done through discussion, reflection, and safe dialoging shared images of a successful organization, which can be developed. A vision can be mapped out and posted.

#### **3. Establish a Learning Climate**

Identify, encourage, promote the positive and good practices help the organization stay on its vision. Continually discover and share what is working. Reward risk-taking with acknowledgements and celebrations. Allow for mistakes; and the lessons learned.

#### **4. Encourage Personal Mastery**

Unless each member of an organization is practicing what is being preached, it will create an uncomfortable dissonance. One way to solve this problem is to support each member to create a personal vision, guiding life principles for both long and short-term personal goals.

#### **5. Design and Promote Learning as a Team**

Through discussion, commitment and regular, purposeful reflection and meeting time, each learner absorbs and shares what is learned with others. Help others become resources for one another by facilitating everyone to get what they need. The organization is now “sideways”. It’s not bottom-up, top-down, but it’s participatory at all levels.

#### **6. Systems Thinking is Everyone’s Business**

Discover what systems are in place that encourages the fulfillment of the collective vision and discover which ones are not at the same time. Understand the key relationships that make your organization a success. Make the systems make sense and make them simple.

#### **7. Nourish the Dream**

All the planning and “seed planting” in the world will produce nothing unless you nourish the dream. Create a fun and dramatic metaphor for the change. Be satisfied with small, continuous improvement. If you discover your key indicators were the wrong ones, starting looking for new ones.

### **Implications**

#### **1. Implications for Higher Education Institutions**

In an interview in *Education Leadership*, Senge stated his views on learning organizations in education. In his point of view, it is difficult that the concept of a learning organization to have considerable validity for educators. Most teachers feel oppressed trying to conform to all kinds of rules, goals, and objectives, many of

which they don't believe in. Senge believed very little that collaborative learning will be taking place among teachers.

Senge questioned the assumption that most schools are like organizations for learning. In his view, most schools are places where people tend to memorize lots of materials. The process is fragmented. Deep learning is a process that is inevitably driven by the learner, not by others and it always involves moving back and forth between a domain of thinking and a domain of action. The historical classroom model of the passive learner must be changed. According to Isaacson and Bamburg (1992), The mental model of the students must be challenged. This mental model offers the opportunity to share their assumptions about children, learning, instructional strategies, curricula, relationships with parents, and the school calendar and schedule—even furniture and architecture.

Another aspect of systems thinking, according to Senge, is in curriculum. In sharing with Senge's view, O'Neil (1995) felt that students need to learn how to use knowledge in ways that is cross-disciplinary boundaries. Schools need to focus on thinking skills and learning skills because those will prepare kids for a world of increasing interdependency and increasing change.

Colleges and universities have unique factors that create barriers to change. Given these impediments, how can meaningful changes be made and institutionalized in subunits of a university? Much controversy exists on college campuses about the value and appropriateness of TQM and Systems Dynamics, yet many are using these techniques to reach desired goals. The concept of evaluating and modifying processes is becoming important in many universities.

Thus, higher education institutions may well serve as HRD, the change agent needed through professional programs offered on campus, as providers of needed manpower in the society.

Appropriately, the word, 'education' derives from the Latin 'educere' which means to lead out as defined by Fox and Sheldrake (1996). The question is,

who or what is being or should be lead out. Which of the existing paradigms or which parts of them should be changed and how?

According to de Geus (1988), the only competitive advantage the company of the future will succeed will be those which continually encourage their managers towards revising their views of the world.

Brigham (1996) suggested that leadership in academic environments is certainly situational and contingent of the members of the higher education community. Situations in colleges and universities are dynamic and in many cases ambiguous. It is often the case that a democratic or participative approach is used rather than an authoritative leadership strategy. Furthermore, expanded by Lathop (1990) the members of the higher education community are highly educated, it is important that the leader develop a strategy in which everyone has an opportunity to assume a leadership role.

Academics also need to adapt to this ever-changing world, which sees changes in educational philosophies, plans and operations. The new assumption about the purpose of education is to produce autonomous lifelong learners. Boud (1981) wrote that "if lifelong learning is to be the organizing principle for all levels of education, the primary mission must be the development of the skills of self-directed inquiry rather than inculcation of subject matter content".

As Fox and Sheldrake (1996) explained professionally, shared collective paradigms are part of the learning organization concept. There is this contraction of education to a fairly limited area of facts and techniques, combined at the more advanced level.

Some argue that laying the right groundwork to cope with societal changes requires no less than a complete overhaul of higher education. Alan E. Guskin, Chancellor of Antioch University, believe it is futile to try to reform the existing systems:

People in colleges and universities--faculty, administrators, students, and even trustees-- act the way they do because the institutional systems of American higher education have supported and rewarded their present behaviors. In addition, creating alternative systems of rewards for faculty and students, or alternative uses of faculty time, or different approaches to facilitating student learning, have been overtly or covertly discouraged at all institutional levels by the organizational structures and systems as viewed by Guskin (1996).

Brigham (1996) suggested that one way to change this is through systems thinking, which looks at the whole educational systems in the sense of interactions rather than separate actions. Systems thinking, which is being used successfully on a few college campuses, takes on these assumptions:

1. An institution is like a complex jigsaw puzzle.
2. Stakeholders inside and outside the system possess important knowledge for change.
3. Pieces of the puzzle, taken together, create a more holistic understanding of the system and its greatest possibilities for change.
4. To understand the whole, larger than usual groups must meet and work together to redesign the system.

Given the diversity and complexity of the environment for leaders in all enterprises, it is essential to understand that the skills of all the members of the organization are necessary. Successful leaders access the resources of their subordinates in order to create working environments where interdependence and cooperation are the cornerstones to success.

The application of leadership strategy cannot be addressed exclusively in a business context. It is especially critical to understand how leadership strategy is implemented in education and how it has operated in a traditional hierarchical, bureaucratic structure for many years. However, it is reasonable to expect that the academic tradition of collegial decision making and committee involvement should lead itself to a more cooperative leadership environment. The leadership strategy in

higher education could certainly be a relational process between the leader and the followers in the organization. The underlying challenge is to develop a leadership.

A recent model of leadership that involves empowerment, shared decision making and power is described as connective leadership by Komives (1994). This model is a helpful reference for the university president, dealing with a more complex and demanding leadership paradigm. The model's strength lies in its ability in assisting leaders to reconcile and connect traditional and unfolding leadership behaviors. The centerpiece of the connective model of leadership is its emphasis on connecting individual power and tasks with the university community in accomplishing mutual goals in a shared vision mode, instilling systems thinking to transform universities into a learning organization as emphasized by Overland (1996).

In a four-year study conducted by Michael Beer, Russell Eisenstadt, and Bert A. Spector, the findings are that leaders of successful change efforts serve as catalysts of a learning process. Their role is not to compel but to "oversee and orchestrate" a process of change beginning with the leader's own learning, specifically with learning information that brings about his or her dissatisfaction regarding the way things are. For effective change to occur, the study found, the leader then needs to "teach" dissatisfaction in such a way that it becomes shared dissatisfaction. Once it has been learned by managers at different levels of the organization and by union officials, then the actual steps in transformation can begin.

## **2. Cultural Implications**

Komin (1990) concludes that as a culture which values "ego and face", straightforward negative performance feedback, strong criticism, and face-to-face confrontation should be avoided. "Face-saving" is a key criterion in handling all person-related decisions, particularly negative ones. Compromise is often used to save face and to keep "surface harmony" at the expense of organisational progress. Thai employees can be motivated to work devotedly for a leader they like and respect. An impersonal, dry-and-cut type of system-oriented managerial style is not as effective as the benevolent paternalistic leadership style. Straightforward, ambitious

and aggressive personalities, although highly capable, are not tolerated and are hardly ever successful. As a culture loosely committed to any ideology, any new system approach or new organizational culture can be indoctrinated, but not without a relationship-oriented leadership-style.

Implications from the APO Symposium on Learning Organization, 25-28 April 2000, organized by the Asian Productivity Organization in Korea support the premise that management, organizations, and institutions are culture-bound, rather than culture free. Because North American organizations have been the model for ideal organizations, there is a need to examine the social feasibility of these reforms. The organisational features that appear to be most compatible with East Asia's cultural context are (1) Customer driven, (2) valuing employees and partners (3) focus on the future, (4) public responsibility and citizenship (5) focus on results and create values. (6) systems perspective (7) creative human resource management. On the other hand, Asian organizations will have the most difficulty implementing (1) agility (2) managing for innovation, (3) openness, (4) creativity, (5) self efficacy, (6) continuous improvement (7) use of flexible, or "virtual" organisations and (8) technological support. The assessment suggests that although Asian organizations will have less cultural difficulty in acquiring the characteristics of total quality organisations, they face more difficulty in transforming themselves into a learning organisation and world class organisations.

Research data reveals that three Thai values, which support the learning organization, are: (1) responsiveness to situation-opportunities, (2) purpose of education is learning how to do and (3) sensitivity to others is valued. These characteristics are the same as Komin's findings. HRD units can provide training courses for changing the paradigms of Thai management and employees.

### **3. HRD as a Change Agent**

The main objective of the research is to explore whether a learning organisation concept is applicable to Thai organisations. The results from this research illustrate that it is possible. However, to become a full fledge of learning organisation both Thai and multinational enterprises including higher education



institutions indicate a need for further development. Thai enterprises need more key areas for development than multinational enterprises. This can be seen from the sub-systems that show in the survey. Another aspect of the research is to find out how many characteristics are contributing factors to a Thai learning organization. There are three most supportive characteristics as opposed to four least supportive Thai characteristics. The four least supportive characteristics can be changed easily through a new paradigm shift or practices.

The research data also reveals that learning organisation concept is possible for Thai culture. Through a change agent, the transformation can be achieved. It is the intention of the researcher to focus on HRD as a change agent for facilitating a learning culture. There is a growing recognition that the HRD unit, as an extension of higher education can be a key driver in engineering organizational change. According to Thomson and Mabey (1994) there are two ways in which HRD plays a central role in managing organizational change. First, it is by responding to a succession of externally driven changes at an organizational level, and to subsequent shifts in strategic direction, each of which has significant effects on development orientated practices in the work place. Second, HRD can and should have an influential role internally by developing and shaping the appropriate competencies, practices, and attitudes that will help the organization deliver its products and services. There is evidence that increasing numbers of people are and will be engaged in “knowledge work” which requires judgement, flexibility and personal commitment rather than mere adherence to produce. Creating the structures and opportunities for HRD to generate and act on ideas independently for the improvement pose a challenge for organizations in this century.

Academics also need to adapt to this ever-changing world, which sees changes in educational philosophies, plans and operations. The new assumption about the purpose of education is to produce autonomous lifelong learners. (Boud, 1981) wrote that “if lifelong learning is to be the organising principle for all levels of education, the primary mission must be the development of the skills of self-directed inquiry rather than inculcation of subject matter content”.

The field of Higher Education is not limited to the physical boundaries and traditional and functions of a so-called "campus". It has been well known for some decades that a branch of higher education has extended into industrial and other business organizations under the departments of Human Resource Development (HRD) that carries out the functions of Higher Education, namely, curriculum development, teaching and learning, research and evaluation. Marquardt and Engel (1993) share their views that the ability to compete globally will significantly place an emphasis on the quality and level of Human Resource Development (HRD) in the organization . For organizations seeking to compete in globalise markets, HRD can make the critical difference. HRD is the ultimate key to executing the bold visions and strategies that is needed for global success.

The difference between failure and success will depend on how well organizations select, train and manage their employees. Training must be the force when the "nutrients" enter into the organizational system. Training can provide "translocation" for the whole system.

Aubrey and Cohen (1995) say large organisations today are re-tooling their training systems in terms of learning in the past twenty years, educational theorists distinguished between 2 types of adult learning university education and skill-based training:

- University education is defined in terms of the goals the individual sets: training is defined as objectives set by the institution.
- University education can be judged only in the long term training has short-term, measurable results.
- University education is for use in multiple, open systems; training is for use in a single, confined system.

Learning at work, however, is no longer focused only on short-term skills or limited in context. In today's organizations, learning is starting to resemble the university model more than the training model. With rapid knowledge turnover and

fast-changing careers, individuals have become the center of the learning system. Both are, therefore, considered to be in the field of higher education.

## **Recommendations**

### **1. Recommendation for Future Practices**

The results of this research prompt several recommendations regarding the concept of learning organizations in both higher education institutions and other organization in Thailand.

1. Organizational culture conducive to learning organizations are identified in Thai national cultures, namely (1) responsive to situation-opportunities, (2) purpose of education is learning how to do, (3) sensitivity is valued. Therefore, leadership and structure of governance should be duly transformed to embrace such cultural components.

2. Leadership was identified in this research as catalysts for chain reaction organizational process towards becoming learning organizations. Consequently, transformational leadership workshops are strongly recommended for administrators in universities as well as business organizations to bring about learning organization characteristics of the whole organizations in Thailand.

3. To be competitive in this fast-changing environment, it is necessary that Thai organizations respond and adapt quickly. Results from the survey show that the learning organization concept for Thai culture is possible. However, to initiate this concept, leaders or top executives of the organization must act as models to provide positive reinforcement in building a strong organizational learning culture via the HRD unit as a change agent.

4. Although the impetus for change can come from anywhere within the organization, down-line members are powerless to effect real change without the vision, commitment and leadership of top management. New leaders must be designers, teachers and stewards. HRD units can initiate various programs to introduce the learning-organization concept in executive-development courses. There should be learning labs where executives can uncover and challenge “mental model”.

5. Middle managers play a critical part in facilitating organizational learning. They are the vital link in the information flow between top executives and down-line workers. Middle managers must assume a new role as coaches and learning leaders. They must display openness creativity and empathy, set an example of personal development. They must also master the concept of delegation and employee empowerment, promote and reward initiative, experimentation and innovation, recognizing that even mistakes advance learning.

HRD could provide courses for middle managers to improve listening and negotiating skills that can transform interaction with other departments into learning experiences. Organizing cross-functional forums and workshops urging the creation of self directed employee teams could be important initiatives as well.

6. HRD must continue to ensure the competency of front-line workers. Courses should be provided to emphasize quality and customer satisfaction which are powerful incentives for learning and innovation. Independent learning skills such as versatility, listening, problem solving, and risk taking must also be encouraged.

## **2. Recommendations for Future Research**

2.1 Results from this study indicate that business and higher education are under the same cultural influence when it comes to learning organizational characteristics. It is thus, recommended that future research should be conducted regarding cultural impacts on both implementation of innovations as well as process by which innovations in organizational changes are conceptualized and designed.

2.2 As transformational leadership is determined as the mainstay for learning organizational development in business and higher education alike, research regarding leadership movements towards systems thinking and learning organizations should be encouraged.

2.3 Corporate culture is just beginning to change in Thailand and some organizations and business are starting to accept and implement the concepts of a learning organization. It will be pertinent and valuable to closely monitor the progress in the development of Thai learning organizations. This is the aspect that future research should focus on.

2.4 Questions that need to be answered include how well Thai organizations can transform themselves into learning organizations and how quickly they can do this. It would also be important to see what aspects of Western models are applicable to Thai learning organizations and how other aspects may best be adapted to suit cultural differences.

2.5 Human resource units are well placed to initiate or spearhead this research which will ultimately help HRD units to develop their role as an extension of higher education and introduce more relevant and effective training to streamline the evolution of Thai learning organizations and put them with international businesses.