

# Organizational Learning in the Higher Education Institutions (A Case Study of Agricultural and Natural Recourses Campus of University of Tehran)

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## Abstract

The purpose of this study was to appraise the level of organizational learning of the agricultural and natural recourses campus (ANRC) of University of Tehran as the oldest higher education institute in Iran. A questionnaire as survey instrument was developed to quantify managerial practices at campus relative to the integral components of organizational learning. The surveys obtained the subjective opinions of faculty members in ANRC of University of Tehran. The numbers of faculty members were 120, randomly drawn from the selected population. Data was analyzed using frequencies, percentages, and mean. Results indicate that the majority of the respondents (90% faculty members) had highly agreements about meeting institutions of higher education of agriculture as learning organization. Results also indicate that those faculty members might also agree which component of systems thinking is the most important dimension of organizational learning.

**Key Words:** Organizational learning, agriculture, higher education, faculty member

## INTRODUCTION

Traditionally, the assumption was that knowledge would lead to appropriate action, as agricultural universities have based programs on the principle that the gap between ignorance and knowing is more important than the gap between knowing and doing. (Lieblein et al., 2000). Based on this assumption, the Knight Higher Educational Collaborative (2000) asserts, universities and colleges expend more time, effort, and money than ever before on gathering data. But these days, there is increasing evidence that lack of knowledge is not the problem for sustainable development of higher education institutes; rather the problem is the gap between knowledge and action (Pfeffer, 1998), as Bauman (2005) concluded that, higher education institutions still have not learnt to

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organize and use data effectively for internal decisions or public accountability. Now, If we acknowledge, learning is a characteristic of an adaptive organization, i.e., an organization that is able to sense changes in signals from its environment (both internal and external) and adapt accordingly (Flood, 2009), the main challenge facing AHEIs is a low level of organizational learning. In this way, in this study, we propose that addressing this gap by appraising organizational learning, opens the door to creative plans for programs in training, putting knowledge into work in the process of learning.

### THEORITICAL BACKGROUND

Learning is the central work of colleges and universities. According to David Garvin (1993), for an entity to be a learning organization, it must acquire new ideas that lead to improvements in the way it does business (Bauman, 2005). This means that learning (1) is a regular part of daily work; (2) is practiced at personal, work unit, Department , and organizational levels; (3) results in solving problems at their source (“root cause”); (4) is focused on building and sharing knowledge throughout your organization; and (5) is driven by opportunities to effect significant, meaningful change(Hertz ,2005).If higher education is to respond to the challenge to stimulate transformational learning at individual, organizational and societal levels, then these disciplines need to be central to leadership development training programmes in all higher education institutions. In this context, according to Walton (1999), organizations may develop into learning organizations by choosing one out of two strategic directions:

1. Systemic development of learning organization: the vision of learning organization is conceptualized and the systemic solutions of its implementation are implemented in practice.
2. The development of learning organization by the principle of ‘side effect’. In this case, organization first of all takes care of improving its various activities, whereas the characteristics of the learning organization form as a ‘side effect’.

In this study, regarding the systemic development of learning organization, definition of Senge (1990) of the learning organization was accepted ‘where people continually expand

their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, and where collective aspiration is set free'. And profile of agricultural higher education institutions as learning organizations was assessed using the common characteristics of learning organizations developed by Neefe (2001) that are addressed below:

### **Leadership**

According to Gephart and Marsick (1996), effective leadership models learning behavior, provides systems to facilitate learning, encourages people to contribute new ideas, ensures the sharing of knowledge and learning, allocates resources to demonstrate the organizations commitment to learning, and shares leadership.

### **Shared Mission/Vision**

Shared vision can be defined as "building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there" (Senge, et al, 1994). Shared vision provides the focus and energy for learning. When people care deeply about something they develop a vision they can truly share which helps to connect them to it and binds them together with others in pursuit of a common purpose or cause (Consortium for Excellence in Higher Education, 2003).

### **Teamwork and Team Learning**

Team learning is a vital element of all learning organizations (Senge, 1990; Garvin, 1993). Team-learning is a collective discipline that involves developing the practices of dialogue and discussion and how to deal creatively with the powerful forces that oppose productive dialogue and discussion, such as conflict, defensive reasoning, game-playing and avoidance routines. It encourages people to develop shared understandings about complex issues, coordinate their activities and share best practice (Consortium for Excellence in Higher Education, 2003).

### **Organizational Culture**

Culture is defined by Gephart and Marsick as "...the glue that holds an organization together. Its culture encompasses basic often-unexamined assumptions about how things are done, as well as the norms and values that guide an employee's behavior". Gephart and Marsick's view of culture aligns and supports Senge's mental model discipline. Gephart and Marsick maintain. Mental models reflect people's perceptions and beliefs that determine not only how they make sense of the world but also how and when they take action. This discipline involves uncovering hidden assumptions and old paradigms. It necessitates looking out at the world from new perspectives and developing new paradigms. It requires interpersonal, reflection and enquiry skills (HEFCE, 2003).

### **Systems Thinking**

Systems' thinking is a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static 'snapshots'. It is also a discipline for seeing the structures and processes that underlie complex situations. It offers a language that begins by training people to think systemically (HEFCE, 2003).

### **Employee Skills and Capabilities**

"Doing the same job over and over, at the same level of efficiency and productivity, is no longer sufficient for organizational success. For an organization just to maintain its existing relative performance, it must continually improve". "The shift requires major reskilling of employees so that their minds and creative abilities can be mobilized for achieving organizational objectives" (Neefe, 2001).

## **METHODS**

A descriptive survey research method was employed for this study to collect data from faculty members in ANRC at university of Tehran. Descriptive research asks questions about the nature, incidence, or distribution of variables; it involves describing but not manipulating variables (Ary, Jacobs, & Razavieh, 2002). The statistical population for this

descriptive study was faculty members of ANRC at university of Tehran during fall 2009 (N = 185). The number of participants was 120, randomly drawn from the selected population. We designed a questionnaire to assess the faculty members' statements with regard to organizational learning components. The questions were then grouped by theme according to the six elements of a learning organization: shared mission and vision, organizational culture, teamwork and team learning, sharing of knowledge, systems thinking, and leadership, along with the foundational concept of employee skills and competencies. A five-point, Likert-type scale (1-5) was used to indicate the degree of agreement with the importance of statements. Faculty members of department of education and extension were used to pilot test the instrument. They were administered the questionnaire and the data were used to establish the instrument's reliability. The reliability of the six constructs, resulting in the following values: .82 for leadership, .93 for shared mission/vision, .81 for teamwork and team learning, .80 for organizational culture, .75 for systems thinking, and .84 for employee skills and capabilities, all acceptable figures according to Alwin & McCammon (2009). Frequencies, means, standard deviations, and presentage were used to describe the responses. The questionnaire was reviewed for content validity by 5 faculty members who had been managed a department and a college for at least two years. Cronbach's alpha reliability coefficients were calculated for each section, resulting in the following values: .82 for leadership, .93 for shared mission/vision, .81 for teamwork and team learning, .80 for organizational culture, .75 for systems thinking, and .84 for employee skills and capabilities, all acceptable figures according to Nunnally (1982). Basic statistics (mean and standard deviation) were employed for data analysis and were conducted in Spss software, which is a comprehensive for social and education research. Graphics of frequency distributions were generated in Microsoft Excel.

## **FINDINGS**

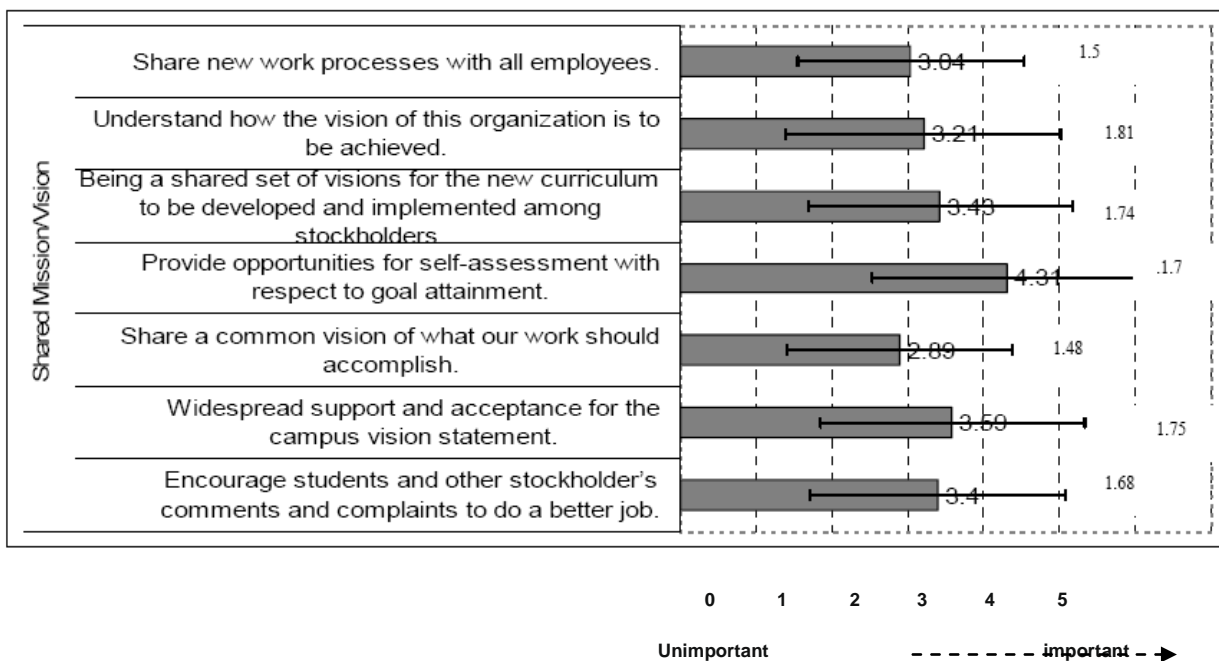
### **Respondents and Organizational Profiles**

The results about the respondents' demographic characteristics as well as their organizational characteristics demonstrated that the average age of the respondents was

44.32 year and average number of years employed in the current job was 12.2 year. The respondents in this study were drawn from several agricultural disciplines. The largest number of faculty members had concentrated their undergraduate studies in the area of animal science (40.3%), followed by 20.8% in the area of horticultural science. Fewer faculty members reported their agricultural specializations as crop science (10.4%) and soil science (3.9%). Several faculty members reported a dual focus for their agricultural studies, combining disciplines such as agricultural engineering, agricultural economics, and biological sciences with animal science, horticultural science, or crop science disciplines.

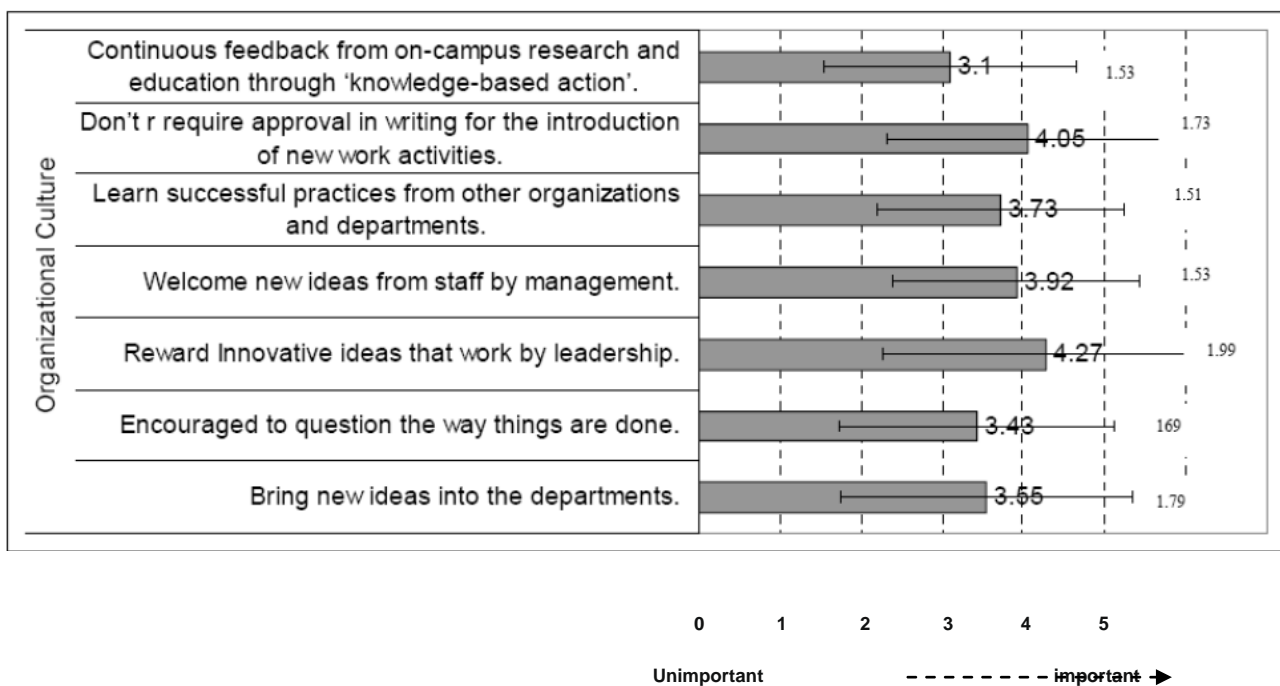
### Faculty Members Statements Regarding the Organizational Learning Measures

The activities in the category of shared mission and vision were designed to measure the effective development of the organization’s mission and vision. Figure 1 demonstrated statistically more mean that departments provide opportunities for self-assessment with respect to goal attainment and have the organization’s vision statement that identifies values to which all faculty members must conform and there are a shared set of visions for the new curriculum to be developed and implemented among stockholders. The mean of this set of activities is 3.29.



**Figure 1.** Importance of activities of shared mission\vision for promoting OL. (Mean value; standard deviation).

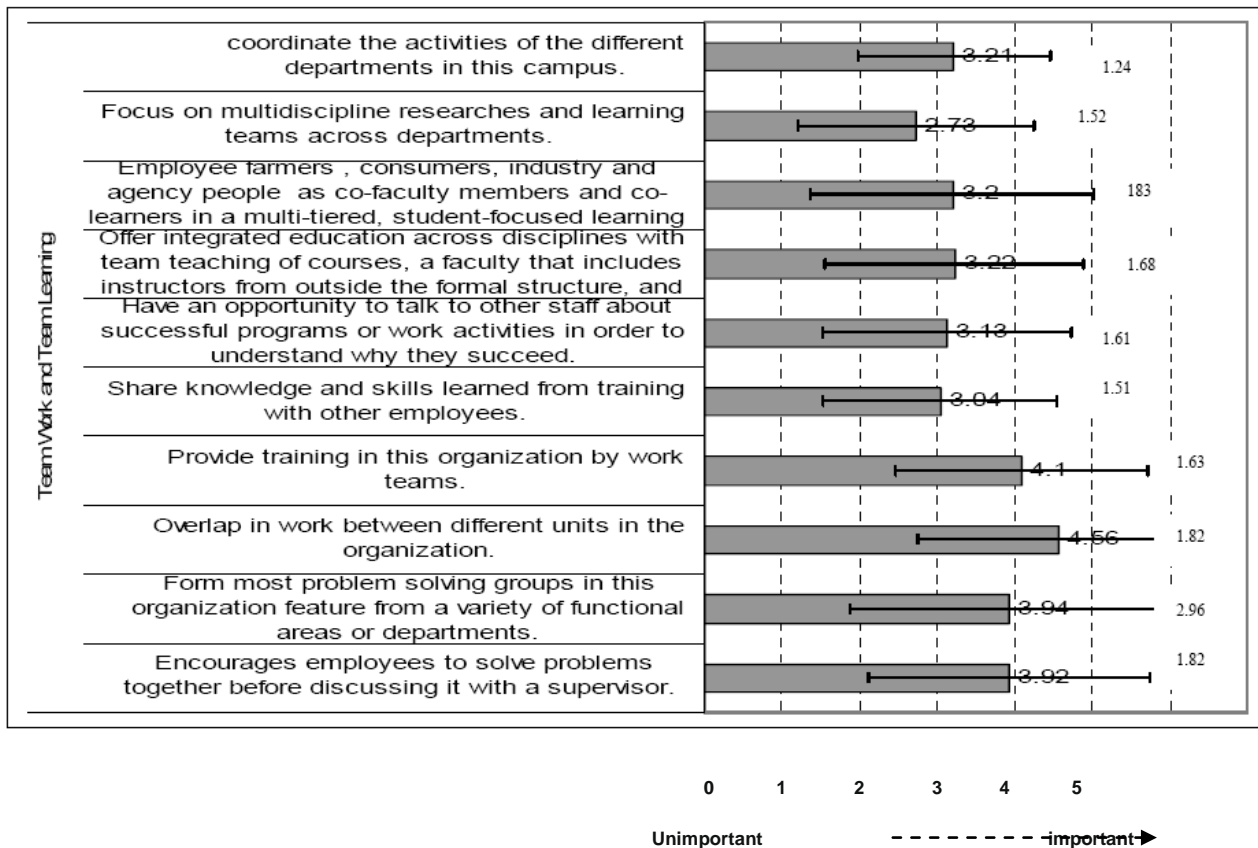
The activities in the category of organizational culture were planned to determine the organization's openness to new ideas and measure the organization's eagerness to promote innovation, experimentation and creativity among their employees. The activities demonstrated an overall tend to organization leaning (Figure 2), as the mean of this set of activities is 3.72 (>3). Findings indicate that respondents assessed as important, measures of encourage employees to question the status quotes and welcome new ideas (from 5 respectively).



**Figure 2.** Importance of activities of organizational culture for promoting OL. (Mean value; standard deviation).

The actions in the category of team work and team learning were also designed to determine the organization's utilization of teams and team development strategies (Figure 3). The activities demonstrated a lot attention to team work and team learning. In this way, the mean of this set of actions is 3.4. Findings indicated that respondents assessed to be the most crucial the overlap and interaction between units and, also encouraged faculty members to solve problems together before discussing them with a supervisor in the ANRC. They also assessed less important actions of doing multidiscipline research and formation learning teams across departments that focuses on broad systems as key components. Findings revealed that there are high degrees of variability among faculty

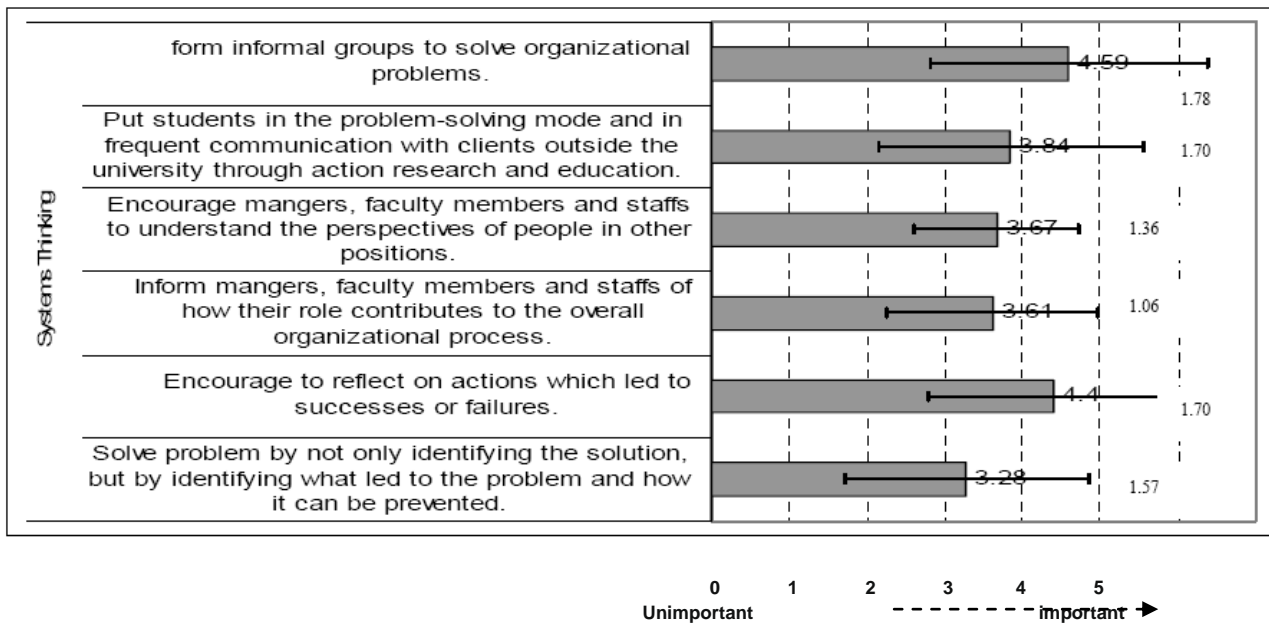
members on this issue as indicated by the higher level range 1 standard deviation for items of this component (Max = 2.06 & Min = 1.06).



**Figure 3.** Importance of activities of team work and team learning for promoting OL. (Mean value; standard deviation).

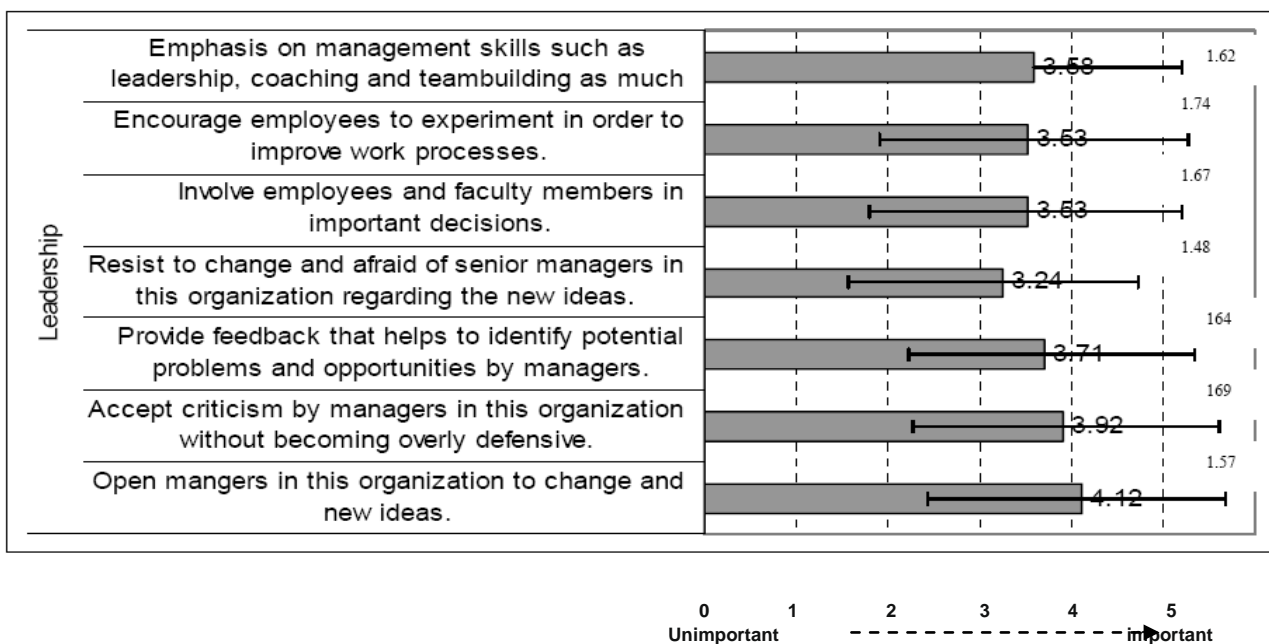
The measures in the category of systems thinking were designed to expose the respondents’ appraisals of the organizational environment as related to an individual awareness beyond his or her job functional area, problem solving, and use of reflection to review action outcomes. Figure 4 confirmed a high level of systems thinking among departments, so that the mean of this set of measures is 3.9. Respondents assessed more important actions of the formation informal groups to solve organizational problems and to reflect on actions which led to successes or failures.





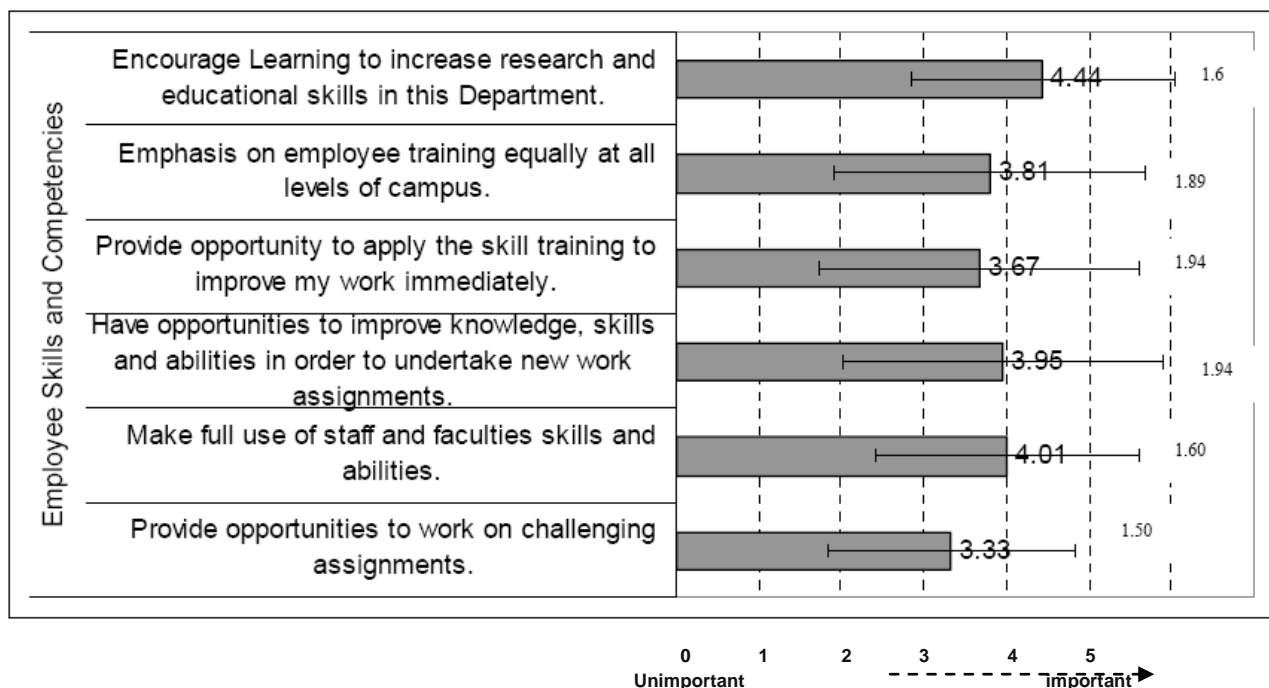
**Figure 4.** Importance of activities of systems thinking for promoting OL. (Mean value; standard deviation).

The measures in the category of leadership were designed to determine the presence and effectiveness of leadership and managerial practices that foster organizational learning. Results showed that there are high means in all actions relate to leadership. Regarding the mean of this set of measures is 3.66.. Range demonstrated deference among answers is tiny. On the other hand, the relative low standard deviations for the “effectiveness of leadership and managerial practices, indicated a relatively high level of agreement among the respondents.



**Figure 5.** Importance of activities of leadership for promoting OL. (Mean value; standard deviation).

The actions in the category of employee skills and capabilities were designed to determine the organizational training philosophy and individual skill development and utilization within the organization. Results of means indicated that respondents evaluated important activities of the encouragement management skills such as leadership, coaching and teambuilding as much as purely technical work skills in the departments of ANRC. They also assessed important measures of learning to increase research and educational skills among faculty members and provide opportunity for faculty members to makes full use of their skills and abilities (Figure 6). Finally, the mean of this set of measures is 3.8.



## DISCUSSION AND CONCLUSIONS

On the basis of the findings, it can be concluded that respondents assessed that the majority of activities are important to promote organizational learning in ANRC as a strategy into learning organization; it supports the findings of Bauman (2005), Wayne et al. (2000) and Willcoxson (2002) that a highly focused learning is the central work of colleges and universities and they are learning organization as inherent. The comparison of means of each of components also revealed that faculty members also evaluated, which actions of systems thinking is the most important in ANRC as a learning organization. This is consistent with Senge's (1990) theory of learning organization that revealed systems thinking is the cornerstone 'discipline' of learning organization. The results clearly

indicate that in discipline of shared mission/vision, however, there is highly agreement among faculty members about opportunities for self-assessment with respect to goal attainment, widespread support and acceptance for the campus vision statement and a shared set of visions for the new curriculum to be developed and implemented among stockholders in ANRC, but also there are lowly agreement about shared new work processes with all employees and share a common vision of what our work should accomplish by managers and employees. This supports the argument by HEFCE (2003) that states one of the key background issues that appears on the face of higher education institutions, is the incompatibility between the purposes of higher education and the manner in which institutions are regulated by bureaucracies largely antithetical to the very values they are required to communicate and disseminate. The study has clearly identified that in relation with organizational culture measures, the highest level of agreement of faculty members was in the encouragement and reward innovative ideas by leadership and manger and less agreement was placed on the continuous feedback from on-campus research and education through 'knowledge-based action' that is applied in the field. According to Lieblein et al (2000) the results provided evidences that the lack of feedback loop is due largely to the major structural and programmatic disconnection between today's universities and both the natural environment and the societies of which they are a part, and on which they depend for support. The analyses conducted in this study also indicated that in relation with dimension of team work and team, however, there are highly agreement about the existence overlap in work among different departments, training as team and problem solving by groups from a variety of functional areas or departments but, there are less agreement at supposing farmers, consumers, industry and agency people as co-faculty members and co-learners in a multi-tiered and have opportunities to share knowledge and skills learned from training with other employees. According to HEFCE (2003), no supposing farmers, consumers, industry and agency people as co-faculty members and co-learners is probably due to conflict of interest between the functions of research and teaching and between the processes of academic (intellectual) and collegial (social) development. Lack of opportunities to share knowledge and skills learned from training with other employees also is perhaps due to no balancing

the three types of interaction – people, task and maintenance - and binding them together to reinforce one another and achieve a common purpose that support the proposition by HEFCE (2003) about the antagonism between internal interests representing the divisions between human capital and structural capital needs and demands within institutions of higher education.

As mentioned above, respondents revealed systems thinking are the cornerstone 'discipline' of agricultural colleges as learning organization. In this regard, results showed that faculty members assessed, forming informal groups to solve organizational problems and reflecting on actions which led to successes or failures within agricultural colleges are encouraged but identifying what led to the problem and how it can be prevented are avoided. This is consistent with Stacey (1993), single loop learning, that it does not involve questioning the assumptions on which their actions are based or how they are feeling, thinking or behaving. Regarding to leadership component, the results indicate that Managers in agricultural colleges are open to new ideas but are resist to change. This supports the argument by HEFCE (2003) that revealed fear of losing control are the underlying causes of refusal and resist to change. Also, this contradicts the proposition by Slater and Narver (1995) state that leaders and manager have a personal high commitment to learning and change. Finally, the study has found that there is highly agreement among faculty members about that learning to increase my research and educational skills is encouraged and provide environment for making full use of skills and abilities in agricultural colleges. However, respondents indicated also that have limit opportunities to work on challenging assignments. At first, this finding is contradicting with the proposition by Neefe (2003) but is consistent with Kaplan & Norton (1996) theory of learning and growth' that employee capabilities are factors contributing to organizational learning in higher education institutions.

### **Recommendations**

The following implications are made by the investigator as results of this study:

1. Enhance Shared Mission/Vision, it is important to develop the vision for organizational excellence and personal fulfillment and root out bureaucracy through agricultural colleges by using appropriate management methods, especially self-assessment based on the excellence model, to stimulate systemic thinking and a questioning approach that will empower people to bring their activities to bear on common purposes they can call their own, the accomplishment of which will give them a sense of personal fulfillment.
2. Sustain learning as organizational culture, it is necessary to enrich continuous feedback from on-campus research and education through provide dynamic learning environments that provide not only knowledge, but also skills including problem solving, communication, leadership and teamwork, flexibility to adapt rapidly, and creativity, as well as analytic abilities.
3. Regarding to Team Work, the suggestion is the strong linkages of university instructors and students with people and questions outside the conventional campus that can be achieved by moving off campus, or by redefining what campus is.
4. HEADs must also actively support systems thinking by promoting the use of cross-functional problem solving teams, who seek the root cause of problems and not simply a solution.
5. Regarding the reduction of resist's leaders and managers to change and learning, higher educational institutions must emphasis on managing the context that is determined by nature and use of power, the level of mutual trust, and the time pressures on people to create an emotional atmosphere in which it is possible to overcome defenses and test reality and a culture that enables complex learning. In this context as Relationships Foundation at Cambridge (Schluter & Lee, 1993) asserts, It needs to promote; directness (one-to-one communications), commonality (a sense of common purpose), parity (equal respect for people whatever their status), multiplicity (encountering people in different roles) and durability (investing in long-term relationships) within Departments among faculty members and managers.

6. Improve faculty members skills and capabilities: the university needs to embrace a new paradigms such as University – Community collaborations that promote greater engagement with community realities and needs which further necessitates a cross-disciplinary (even a-disciplinary) approach. This helps to break down the traditional scientific association with abstract (and sometimes irrelevant) theory by emphasizing theory grounded in practice.

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