LEARNING ORGANIZATIONS IN THE INFORMATION AGE: THE CASE OF SELCUK UNIVERSITY, TURKEY*

Adem ÖĞÜT¹, Şakir BERBER²

ABSTRACT

In the information age, the concept of learning increasingly gains importance both for individuals and organizations. A learning organization is defined as an organization that facilitates the learning of all its members and teams and continually transforms itself. Being a learning organization is crucial for educational organizations, particularly colleges and universities since they should transform themselves into open system-learning units to meet the requirements of the age of rapid organizational change.

Selcuk University is Turkey's one of the largest multidisciplinary university, education policy of which is to equip students with necessary knowledge and research capabilities to be successful in the global information age. The administration of Selcuk University is determined to facilitate and lean the learning processes in the academic units and formulates its policies in accordance with the demands and imperatives of this age. In this context, Selcuk University is found to be conscious of utilizing the modern instruction methods, especially those supported by the advanced information technologies. In this study, Selcuk University is examined in terms of the criteria of a learning organization.

Key Words: Learning Organization, Information Management, Higher Education, Organizational Knowledge.

1. Introduction

In the age of rapid organizational change via the overall technological improvement, learning has become a critically important concept for organizations as much as for individuals. The organizational environment across the world is getting swept by a new paradigm. In this emerging paradigm, terms like learning, information, communication, knowledge management, and computation have ac-

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¹ Ph. D, Selcuk University, Faculty of Economics and Administrative Sciences, Konya, Turkey.

² Ph. D, Selcuk University, Faculty of Education, Konya, Turkey.

quired a critical relevance to an understanding of the nature of contemporary organizational life.

A learning organization is defined as an organization that facilitates the learning of all its members and teams, and continually transforms itself. Learning organizations generally have an organic structure rather than a mechanic structure. The model of learning organization contributes valuable ideas to the communication channels, institutional leadership, and teamwork processes in the organizations.

In the organizational context, learning is not a narrow concept. A learning process for an organization should include retrospective learning, learning from the current status and prospective learning. In terms of educational organizations, such as colleges and universities, it is possible to reach organizational goals, in case the management integrates and coordinates the goals of students and faculty members with the vision of the institution.

Selcuk University is a public, comprehensive university based in Konya, Turkey, specializing in high-quality educational opportunities and preparation for self-reliant and effective academic service in Turkey. Selcuk University practices a model of collaborative decision making in accordance with its educational policies. In this study, Selcuk University is planned to be examined in terms of the criteria of a learning organization model.

2. The Organizational Transformation in the Information Age

Around the 1970s, there was a growing consensus about that the world had been moving into the 'Information Age'. Around the same time, another term that became popular was 'the knowledge worker'. Since the mid-1980s, however, there has been a sudden avalanche of a new kind of vocabulary (Shukla, 1997:12). Corporations, which so far had been technical and economic entities, are described as 'information-based organization' (Drucker, 1988), 'educated organization' (Handy, 1990), 'knowledge-creating company' (Nonaka, 1991), 'learning organization' (Garratt, 1987; Pedler, Boydell and Burgoyne, 1989; Senge, 1990), and so on. In this context, instead of product-market strategies, terms like core competencies, intangible assets, knowledge-based capabilities, etc. became popular.

In the information age, a world-wide information revolution is in progress. The necessity of learning has enormous impacts on individual, organizational and social life. The advanced information and telecommunications technologies make the world shrink. At the same time, information systems become available at cheaper prices and create entirely new potentials of information and working processes with their rapidly increasing capacities.

Today, geographic distance tends to lose its importance. Many production processes are made dramatically more efficient. Entirely new requirements to the qualifications of employees are often the consequence of these trends. The basic conditions of education are radically changed. In the global perspective, the infor-

mation society is certainly becoming a reality that we cannot dismiss. The only question is how we will respond to it.

The application of the concept of learning to the organizational world can be traced back to as early as late 1960s. This probably was an indication of a growing awareness that an organization, after all, is not an impersonal mechanical system, as the early forefathers of management, Frederick Taylor and Henry Fayol, had described it to be.

An organization consisting of people whose perceptions, experiences, thinking, and judgments, played a critical role in its functioning and determined its effectiveness. Moreover, the rules and systems of the organization captured the intellectual and cognitive capabilities of its members. Thus, the early studies on organizational learning aimed at developing an understanding of how the changes in these cognitive frameworks of the organizational members affected organizations. As known, land, labor force, capital and entrepreneurship are counted as the factors of production in organizations regardless of the type. Today, we need to add another factor to this process: 'knowledge'. According to Sanchez and Heene, typologies of organizational knowledge may take the following forms; know-how (practical knowledge), know-what (strategic knowledge), and know-why (theoretical knowledge) (Sanchez and Heene, 1997).

In the post-industrial age, the success of an organization lies more in its intellectual and systems capabilities than its physical assets (Quinn, Andersen and Finkelstein, 1998:181). The framework of a learning organization focuses heavily on developing the intellectual and systems capabilities of organizations on a continuous basis. The organizational world is not the same any more. Davidow and Malone (1992) in their book 'The Virtual Corporation' have claimed that: 'In the years to come, incremental differences in organizations' ability to acquire, distribute, store, analyze, and invoke actions based on information will determine the winners and losers of the battle for the customers. In this context, converting knowledge into core competencies and competitive advantage depends essentially on sharing and coordinating knowledge within the organization and with collaborating businesses (Pemberton and Stonehouse, 2000:193)

Without knowledge, the others become useless and it is impossible to predict even the nearest future of the organization operating in the circumstances of the rapidly changing environment. By the same token, knowledge and information are increasingly described as resources, power bases, assets, competitive advantages, and strategic weapons.

3. Organizations as Learning Systems or Learning Organizations

As individuals, we usually learn from our mistakes. When we make important decisions in the organizational processes, we should make a record of them that would contain (a) their expected effects and when we expect them, (b) the assumptions on which our expectations are based, (c) the information used in making decisions and (d) a description of how the decision was made and who participated in making it (Ackoff, 1986:167-68). By the same token, today, most learning organizations strive for strategic organizational learning, a process including a broad category of long-term learning, retrospective learning (learning from the past), learning from the present and futuristic learning (learning from the future) (Keys, 1994:4).

A learning organization is an organization skilled at creating, acquiring and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights (Garvin, 1993:51). According to this definition, new ideas are essential if learning is wanted to be realized. In this respect, we need to recall the basic approach of Peter Senge in his book 'The Fifth Discipline': 'learning organizations are the places where the people continually expand their capacity to create the results they truly desire, where new patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together' (Senge, 1990).

Senge arrived at the idea of the learning organization through his work on the systems dynamics. He concluded from his work that all systems (whether an electrical, biological or an organizational system) behave in an integrated manner. No event in the system takes place in isolation. In other words, everything affects all other parts within the system.

According to Senge, learning occurs only if the organization develops the discipline of 'systems thinking', namely if it improves the ability to see relationships across time and space, and think holistically. However, Senge pointed out that systems thinking is not the preserve of only the top management team. In fact, in the present context, it is 'no longer sufficient to have one person learning for the organization.

As Argyris indicates; before an organization becomes a learning organization, it must first resolve the learning dilemma (Argyris, 1998:81). In today's organizational life, success depends increasingly on learning, but most people don't know how to learn. On the other hand, those members of the organizations who may assume to be the best at learning are usually not very good at learning. In other words, professionals sometimes embody the learning dilemma; they are enthusiastic about continuous improvement and often the main obstacle to its success. Effective learning is nothing more than the way of people reason about their own behavior.

The Learning Organization is an ideal, a vision and an unlimited journey. Various organizations or the parts of organizations achieve this goal in varying degrees. Due to the enormous volume of knowledge re-produced daily in the brains of organizations, no organization can claim that it learned or it completely finished the learning process. Senge suggested that for the effective cultivation of systems thinking at all levels, an organization must encourage four other complementary disciplines: it must develop a sense of *personal mastery* among its members; it must facilitate the development of a *shared vision*; it must encourage *team learning*:

and it must encourage people to question the old and to create new *mental models* of organizational functioning.

In the 1990s, the concept of 'learning organization' became so popular that many respectable academic institutes - for example, MIT (USA), opened educational centers for Organizational Learning. Academic journals like *Organization Science, The European Journal of Operations Management, Planning Review, Organizational Dynamics* and *Productivity*, devoted complete issues on the topic (Shukla, 1997:21). According to Shukla, Senge's five disciplines matched the spirit of the time. They provided an intelligent recipe for corporate effectiveness at a time when many companies were experiencing that the previously successful routines and strategies were becoming increasingly ineffectual. Moreover, Senge's ideas were also corroborated by the emergence of many parallel managerial concepts and practices-for example, core competence, self-managed work teams, empowerment, reengineering, and organizational architecture-which, too, challenged the traditional wisdom about managing.

Many corporate executives, too, have started recognizing business sense in building an organization in which knowledge and learning are fundamental principles. According to Ray State, the Chairman of Analog Devices (USA), the rate at which individuals and organizations learn may become the only sustainable competitive advantage. Arie P. De Geus, Planning Chief of Royal Dutch/Shell Group of Companies, states that learning is not a luxury. It's how companies discover their future. By the same token, A. Kutlu, The Rector of Selcuk University (Turkey) argues that today's knowledge is becoming obsolescent tomorrow in the circumstances of the information age, so the managements of organizations must create a learning environment for the internal and external members (www.selcuk.edu.tr/duyurular).

4. A Case Study: Selcuk University, Turkey

The reflexive educational organization is one that is in tune with the multiple demands and complex expectations of the contemporary society. The educational organizations need to attend to the changing needs of the students, to think ahead and reflect on the economic and cultural changes affecting the students, and the school and take the necessary action to educate the students to participate constructively in the changing situation. Educational organizations will vary in the extent to which they are successful in managing themselves as reflexive agents for a more participatory global society (Porter, 1999:101). In relation to this particular objective, the atmosphere created by Selcuk University and the four campuses located at the different parts of Konya constitute a key element in the diverse cultural life.

Selcuk University has been continuing education with four modern campuses; three in Konya city center and one in Karaman (which is a city located in the southern part of Konya), and Vocational Colleges in 24 different locations. As a matter of fact, Konya, as a city succeeding in bringing together the modern and

the traditional has a very fascinating history, which goes back to thousands years ago. Konya does not only represent the traditional and the modern ways of life together in the same place, but also has the character of a living museum of civilizations. Located at the center of Turkey as the largest city in terms of area and the fifth biggest city in terms of population with its wealth of historical, cultural and natural assets, Konya has become a focus of interest for many local and foreign visitors alike.

4.1. The Location, History and Current Situation of the University

Selcuk University is Turkey's one of the largest multidisciplinary university, situated in the Central Anatolia region of the country. The University was established in 1975 with only two faculties. It has rapidly developed and become one of Turkey's outstanding universities, consisting of 16 faculties, 4 institutes, 1 State Conservatory, 25 Vocational Schools of Higher Education, and 13 Research and Application Centers. The University employs approximately 3900 academicians and administrative personnel. Currently, the University ranks as one of the biggest universities of Turkey with a student population of nearly 60.000.

For years, the university has been one of the popular universities in terms of preferences among students having the so-called "national university exam-OSS". Only one third of the student population numbering about 20.000 is from Central Anatolia region, the remainder coming from all over the country. The University also has a considerable number of foreign students mostly from the Turkic Republics of Central Asia, the Caucasus, the Balkans and Russia respectively.

Selcuk University, with its successful students, gives careful consideration to increasing the quality in all subjects and using knowledge and technology, which are the requirements of the new age. The University's education policy is to equip students with the necessary knowledge and research capabilities to be successful in the information age. Every year the University offers approximately 1000 degrees and especially the number of postgraduate degrees taken has increased significantly. Undergraduate studies (equivalent to a USA's B.A. /B.Sc.) consist of basic and subject studies and last between 4-5 years. Recently, numbers of undergraduate programs have started to implement a one-year English preparation course.

4.2. The Administration of Selcuk University

The formal head of the university is the President (Rector) who is the chief academic and executive officer of the University. He is the chairman of the University Senate and the Executive Committee, and is responsible for maintaining the order of the university. He holds office for four years and is assisted by the Vice-Presidents. The General Secretary is responsible for providing all the University's administrative services and is assisted by the Vice-General Secretaries.

The University Senate is a body of members including the deans and the elected representatives of faculties and the directors of the vocational schools. The Senate is responsible for making decisions about curricula, examinations and other administrative and university policies. On the other hand, the University Executive

Committee is the body that is formed of 15 deans and 3 elected members and chaired by the President.

The dean of each faculty normally holds office for three years and chairs the Faculty Board Meetings. The heads of the departments are either elected by the heads of the divisions; if there is not any division under the department, they are appointed by the deans of the faculties and hold office for three years. The department academic board consisting of full professors, associate professors and assistant professors, is the decision making body in the departments.

4.3. Education and Research Areas of Selcuk University: University as a Learning Unit

The University embraces many diverse fields and disciplines of study, such as; the Faculty of Science and Literature, the Faculty of Economics and Administrative Sciences, the Faculty of Agriculture, the Faculty of Dentistry, the Faculty of Veterinary, the Faculty of Vocational Education, Meram Faculty of Medicine, Selcuklu Faculty of Medicine, the Faculty of Technical Education, the Faculty of Theology, the Faculty of Education, the Faculty of Communication, the Faculty of Engineering and Architecture, and the Faculty of Law.

Mainly because of its location, one of the main objectives of the University is to function as a development center in the Central Anatolia. As commonly known, universities are crucial for the development of civic society, sometimes called the civic community (Lang, 1999). In addition to educational activities, the University puts a greater emphasis on research activities in all fields ranging from medicine to law (Selcuk University, 2002). In order to materialize this aim, many institutions and research centers have been established since the very foundation of the University, such as;

- Computer Sciences,
- Accident Research,
- Applied Mathematical Studies,
- Ataturk's Principles and Revol History,
- Environmental Problems,
- Experimental Medicine,
- Family Studies,
- International Relations,
- Turkish Folk Culture.

Apart from research and development activities in their own field, these centers organize national and international conferences periodically. Through the projects of its institutions and research centers in particular, the University has been granted many funds by various governmental and non-governmental organizations. Also the University has its own foundation to sponsor scientific projects.

For the last ten years, scholarships particularly for research assistants have been obtained from foreign universities as well. Productive student and faculty exchange programs have been arranged through mutual co-operation with some foreign universities, such as Michigan State University, University of Houston, Kansas State University, and Fort Hays State University (www.selcuk.edu.tr/duyurular). In addition, the University offers assistance for solving various kinds of national and regional problems in the fields of economics, agriculture, society, environment and health. The University provides a number of social services to the students and university staff as well as to some nation-wide institutions. Selcuk University is also networked in various ways with the private sector and others to promote the transfer of innovations and technology.

One of the major aims of the University is to expand international cooperation through establishing close academic ties, student and faculty exchange programs and joint projects. Accordingly, the University has recently set up a unit for developing international and intercultural relations.

5. Conclusion and Recommendations

Joney and Hendry (1994) make a distinction between Organizational Learning and the Learning Organization, the former emphasizing 'human resource management', 'training', and 'knowledge' while the latter stressing to 'the expansion and development of organizational capability and capacity' (McHugh, Groves and Alker, 1998). In this respect, in the lights of the secondary data available and our focused observation, we may argue that SU excels in the process of organizational learning; however, it will take time to become the so-called "learning organization". It is observed that some strategic steps concerning the criteria of learning organization need to be taken by the administration and the members of SU.

SU is a state university. In other words, the organizational processes should be evaluated on the basis of the related public sector regulations. The literature on the public sector contests that ambiguity over purposes inhibits to become a learning organization (Smith and Taylor, 2000:203). The capability of the overall public sector has been criticized by a number of academic reports, congressional hearings, etc. Even though the case we analyze is in the scope of Turkish public sector organizations, we do not concur with the biased notion implying that public sector, in general, is full of inefficiency, paperwork and sluggishness, and therefore cannot develop the learning organization model.

Developments in communications and information technology have transformed the ability of organizations to acquire, store, manipulate, share and disseminate knowledge resulting in new management styles and organization structures (Pemberton and Stonehouse, 2000:184). SU changes in accordance with the imperatives of the post-industrial age. The words change and learning are generally used as substitutional. In fact, we are not in favor of the collective analysis as syllogistic (learning organizations change, organization 'A' has changed, therefore 'A' is a learning organization (McHugh, Graves and Alker, 1998).

The University provides students, faculty and staff with access to diverse information technology (IT) capabilities through various PC sites for general use in the libraries and faculty laboratories. The departmental products of information technology is also used for Internet-based academic research on a particular topic, a part of formal teaching in the courses as well as in the process of decision making of departmental board meetings. A number of high performance workstations are provided in the departments, which give access to a wide range of applications, such as word processing, database handling and especially programming languages.

The University has a strong tradition of organizing and hosting national and international conferences and is rich in facilities. Modern physical training and sport facilities facilitates the organization of clubs and cultural societies among students.

There are around 50 student clubs and societies, which are active in many diverse fields of interest. The University administration provides facilities, funding and consulting services for the student clubs and societies. The President and the Vice-President responsible for student services meet the representatives of the student clubs and societies periodically to share their ideas about the universal atmosphere and educational policies and implementation. The student clubs and societies are regarded as informal departments of the institution as a whole by the university. In this context, it can be argued that the administration internalizes the so-called shared vision, teamwork and systems thinking, which are the 'sine qua non's of the learning organization model.

Selcuk University has a well-deserved reputation in teaching and research. The university is determined to maintain the criteria of the learning organization. Beginning from its establishment, the university has been radically reformist in its teaching policies by introducing new undergraduate and graduate programs and methodologies. It is shown by the publications that Selcuk University is a forward-looking university in that it formulates its policies in accordance with the demands of the information age. The University prides itself on its long-lasting relations with alumni.

However, it should be acknowledged that the combination among the lecturer, student, and the subject matter in any particular case needs to be taken into account in the educational policy-formulation process of a learning organization. Researchers at the Institute for Research in Teaching have found that there is a relationship among instructors, learners, and the subject matter that can be improved with knowledge and the understanding of the cultural diversity (Gollnick and Chinn, 1994:299-300).

According to Oakes, when students and instructors are mutually involved in learning, trusting relationships are more likely to develop. In other words, the learning methods and styles utilized in an educational organization must be transformed to constitute a creative environment for learning. Selcuk University is very

conscious of utilizing the modern instruction methods, especially those supported by the advanced information technologies.

Furthermore, cooperative learning is an instructional strategy that assists in developing trusting relationships and increasing academic achievement. In the traditional classroom, the instructor usually lectures and leads the discussion. In some cooperative learning activities, competition is included but it occurs between groups, rather than between individuals (Gollnick and Chinn, 1994:305). We observe that especially in the Faculty of Economics and Administrative Sciences, the Faculty of Communication and the Faculty of Education, some similar models of cooperative learning are successfully implemented.

In the lights of the secondary data available and our focused observation, the classrooms and the conference halls in Selcuk University has been renewed or redesigned and the learning environment has been enriched by certain new educational technologies, such as, asynchronized distance education systems, data shows, synchronized translation systems, etc. In addition to that, experts and nation-wide popular professors from the related areas are invited to university so that the students are given the opportunity to compare the theoretical frameworks and the real-life examples.

The administration of Selcuk University is determined to facilitate the learning processes in the academic units. In relation to this, the infrastructure for information technology has been renewed (hardware) and updated (software) continuously, library services are designed and linked internationally (inter-library loan system in use) and scholars from different faculties meet in the interdisciplinary research and application centers to propose distinctive solutions.

Learning is a crucial element especially for the higher education organizations, since their main objective is education. The Rector, A. Kutlu, states that 'it is not enough for Selcuk University to share its learning mission with the staff and the students. We need to articulate our mission to local, national, and international society respectively'. In the Information Age, neither the profit nor the product is important without continuous learning as the organizational world rapidly moves from its tangible bases to intangible ones.

The activities of the University are characterized by a keen awareness of prospective demands, a high level of technological sophistication, networking both within the academic community and with the environment, an emphasis on the internationalization and research, as well as teaching of a high standard. Students are introduced to the entrepreneurship, the number of traineeships rises steadily and contacts with the labor market increase. Where postgraduate programs are concerned, efforts are also made to develop a flexible model of education enabling a rapid response to the changing demands of the job market. The mission of the University includes raising the standard of research to a high national and international level and the constant overhaul of education and training to correspond to individuals' and society's needs.

It is a fact that the extraordinary advances in the information technology and telecommunications transform how we work, learn, and communicate. A cultural revolution supported by the use of advanced information technology, should take place in any type of higher educational organizations in order to become learning organizations.

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