

Constructing an Organizational Learning and Development Model for Management Education Programs

Özlem Öğütveren Gönül

College of Business Administration, Başkent University, Ankara, Turkey

ozlemog@baskent.edu.tr

Abstract

This paper aims to present an organizational learning model for continuous improvement in management education programs. The model is derived from David Kolb's (1984) Experiential Learning approach using his learning style inventory (LSI) and Learning Skills Profile (LSP) (Boyatzis and Kolb, 1991a, 1991b, 1995) in a two-level research design. The learning styles of the first grade new entrant students and the senior level graduate candidate students will be measured and compared to assess the impact of the management program on their learning style development. In the second phase of the research, the expectations of the professional managers in three areas of specialization (general management and/or human resource management – finance management – marketing management) and three distinct sectors (entertainment and tourism – banking – manufacturing) will be analyzed. The comparison of the two sets of data shows the differences between the managerial skills of the new graduates and the expectations of the professional managers about the managerial skills of the new graduates to be hired by these organizations. According to the results of such an observation, a discussion about how the management programs, becoming learning organizations, can develop their curriculum and educational tools to satisfy the needs and expectations of the professional organizations from newly graduated students to enter the work force is raised.

Introduction

Learning is a competence that creates competitive advantage both for individuals and organizations. It is the major process of adaptation (Kolb, 1984). Continuous changes in the environment forces all organizations to create new strategies for adaptation and survival. Hence, the ability to learn, itself is one of the most critical skills in today's organizational life. Universities and colleges are institutions with primary goals of educating students to prepare them for a professional career life. Apprehension of quality in higher education should not be perceived as conformity to a standard, hence higher education is supposed to promote creativity and innovation (Ginkel, 1995). Therefore, the performance of the higher education institutions, courses of action to be taken for upholding the quality of education in these programs and the future profile of the universities is often discussed in the academic world (Ginkel, 1995).

Becoming a learning organization, higher education institutions can enhance organizational renewal methods for obtaining a higher level of adaptation to their environment.

One of the predominant concepts of higher education is that it is seen as a process in which the students are seen as products to be developed for the labor market where the higher

education becomes an input in the growth and development of qualified human resources (Barnett, 1992).

Organizational Learning

Organizational learning is a competence that all organizations should develop with the premise that, the better organizations are at learning, the more likely it is they will be able to detect and correct errors (Argyris,1999). Probst and Büchel (1996) define organizational learning as “the ability of the institution as a whole to discover errors and correct them, and to change the organization’s knowledge base and values so as to generate new problem-solving skills and new capacity for action”. According to Fiol and Lyles (1985), organizational learning is the process of improving actions through better knowledge and understanding. It results in associations, cognitive systems, and memories that are developed and shared by the members of the organization. With a similar emphasis on the improvement of future performance, DiBelle and Nevis (1998:28) define organizational learning as the capacity or process within an organization to maintain or improve performance based on experience. learning is about creating, achieving and communicating an organization’s own peculiar practices, features and differences. Behavior modifications, including relationships are necessary in providing the organizational learning process to eventuate (Espejo at al.,1996:91).

Organizations need to maintain knowledge about new products and processes, understand what is happening in the outside environment and produce creative solutions using the knowledge and skills of all within the organization (Argyris, 1999). An important species of organizational learning consists in an organization’s improvement of its task performance over time. Such instrumental learning refers to an action’s effectiveness in achieving its intended objectives and to criteria and measures for assessing that effectiveness (Argyris and Schön, 1996:4).

Huber (1991) has a more behavioral perspective to organizational learning emphasizing that an entity learns if, through its processing of information, the range of its potential behaviors is changed. He identifies four constructs related to organizational learning: 1) Knowledge acquisition, the process by which the knowledge is obtained, 2) Information distribution, the process by which information from different sources is shared and thereby leads to new information and understanding, 3) Information interpretation, the process by which distributed information is given one or more commonly understood interpretations, and 4) Organizational memory, the means by which knowledge is stored for further use (Huber, 1991: 88-90). One of the major processes through which organizations acquire knowledge or information is experiential learning. The literature related to experiential learning shows that the process can take place intentionally and systematically as well as unintentional and unsystematic experiences and one of the approaches to facilitate intentional organizational learning is to increase the accuracy of feedback about cause-effect relationships between organizational actions and outcomes (Huber, 1991: 91).

Kolb’s Model of Experiential Learning

Kolb defines learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb, 1984:41). Through the influential intellectual origins of Dewey, Lewin and Piaget’s work in experiential learning, Kolb drives the process of learning as a four-stage cycle of (1) concrete experience, followed by (2) observation and reflection,

which leads to (3) the formation of abstract concepts and generalizations, which leads to (4) hypothesis to be tested in future action, which in turn leads to new experiences.

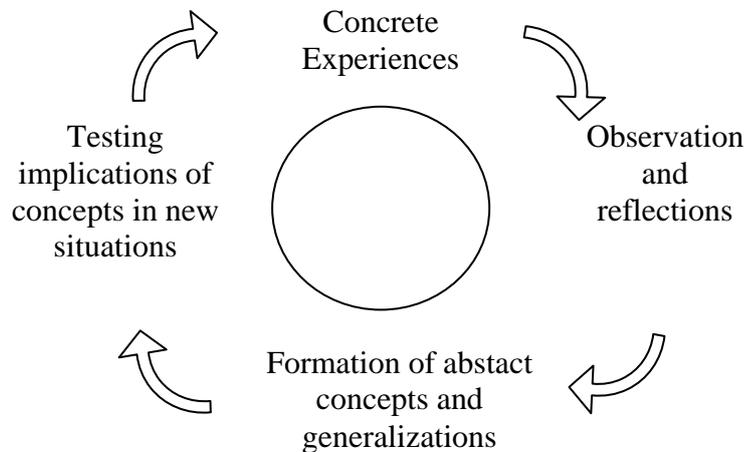


Figure 1: Four-stage Learning Cycle (Kolb, 1984:21)

Kolb's model of experiential learning portrays two dialectically related modes of grasping experience- Concrete Experience (CE) and Abstract Conceptualization (AC)- and two diallectically related modes of transforming experience –Reflective Observation (RO) and Active Experimentation (AE) (Kolb and Kolb, 2005:2). The effective learner relies on four different learning modes. That is, he must be able to involve himself fully, openly and without bias in new experiences (CE), he must be able to reflect on and observe these experiences from many perspectives (RO), he must be able to create concepts that integrate his observations into logically sound theories (AC), and he must be able to use these theories to make decisions and solve problems (AE) (Henke, 2001:17).

<p>Concrete Experience (CE)</p> <ul style="list-style-type: none"> -Learning from <i>feelings</i> or reactions to experience influence learning. -Represents a receptive, experience based approach to learning, relying heavily on feeling-based judgement. -High CE individuals are empathetic and people-oriented. They find theoretical approaches unhelpful and prefer treating each situation as a unique case. They learn best from specific specific examples in which they can become involved. They tend to be oriented more towards peers and less towards authority in their learning, and benefit most from feedback and discussion with fellow learners.
<p>Reflective Observation (RO)</p> <ul style="list-style-type: none"> -Learning from <i>watching</i> and listening influence learning. -Tentative, impartial and reflective approach to learning. - High RO individuals rely on careful observation in making judgements, and prefer learning situations such as lectures, allowing them to take the role of impartial observers. These individuals tend to be introverts.
<p>Active Experimentation (AE)</p> <ul style="list-style-type: none"> -Learning by <i>doing</i> or results driven influence learning. -Active doing orientation to learning, relying on experimentation. -High AE individuals learn best by engaging in projects, homework, small group discussions. They dislike passive learning situations like lectures. These individuals tend to be extroverts.
<p>Abstract Conceptualization (AC)</p> <ul style="list-style-type: none"> -Learning from <i>thinking</i> or analyzing problems in a systematic method influence learning. -Analytical, conceptual approach to learning, relying heavily on logical thinking and rational evaluation. -High AC individuals are oriented towards things and symbols, less towards other people. They learn best in authority directed, impersonal learning situations emphasizing theory and systematic analysis. They are frustrated by and benefit little from unstructured discovery learning approaches like exercises and simulations.

Table 1: Characteristics of different learner modes (Adapted from Henke, 2001:21.)

An individual's learning style is a combination of the four basic learning modes. Kolb's learning Style Inventory (LSI) measures an individual's relative emphasis on these four learning modes (CE, RO, AC, AE). And, then by simple calculation, the individual finds out his combination scores indicating the extent to which he emphasizes abstractness over concreteness (AC-CE) and, active experimentation over reflective observation (AE-RO). Kolb and those who have followed his tradition argued that a learning style is not a fixed trait, but a differential preference for learning, which changes from situation to situation. At the same time there is a long-term stability in the learning style (Coffield et al., 2004:60-61, Kolb, 2000:8). While individuals prefer one learning style to another, they will move between learning cycles with the actual process of growth in any single individual, probably proceeding through successive oscillations from one stage to another (Henke, 2001: 6, Kolb et al., 1979).

<p>Accommodator Best at CE and AE. Greatest strength lies in doing things, carrying out plans, experiments and involving in new experiences. Tends to be more of a risk taker than the other learning styles. Tends to excel in situations where must adapt to specific immediate circumstances. In situations where the theory or plans do not fit and facts, he will most likely discard the plan or theory. Solves problems in an intuitive, trial and error manner. Tends to be at ease with people but is sometimes seen as impatient and pushy. Educational background is often in technical or practical fields such as business. In organizations accommodators are found in action-oriented jobs, often in marketing and sales.</p>	<p>Diverger Best at CE and RO. Greatest strength lies in imaginative ability. Excels in the ability to view concrete situations from many perspectives. Performs better in situations that call for generation of ideas such as in brainstorming sessions. They are interested in people and tend to be imaginative and emotional. They are aware of meanings and values, have broad cultural interests and tend to specialize in arts. They adapt by observation, rather than action. Mostly seen in managers from humanities and liberal arts background. Human Resource managers, counselors, organization development specialists in organizations tend to have this style.</p>	AE-RO
<p>Converger Best at AC and AE. Greatest strength lies in the practical application of ideas. Good at problem solving, decision making. People with this style do best in situations such as conventional intelligence tests where there is a single correct answer or solution to a question or a problem. Knowledge is organized in such a way that through hypothetical deductive reasoning can foster it on specific problems. They are unemotional, preferring to deal with things rather than people. They tend to have narrow technical interests and choose to specialize in physical sciences. Usually seen in engineers.</p>	<p>Assimilator Best at AC and RO. Greatest strength lies in the ability to create theoretical models. Excels in inductive reasoning in assimilating disparate observations into integrated explanation. Less interested in people, and more concerned for abstract concepts, but also less concerned with the practical use of theories. It is more important that the theory be logically sound and precise. It is a characteristic of the basic sciences rather than applied sciences. In organizations assimilators are found in research and planning departments.</p>	
AC-CE		

Figure 2: Learning Styles Type Grid (Kolb et al. 1995: 54)

The Learning Skills Profile (LSP, Boyatzis and Kolb 1991a, 1991b, 1995; Kolb and Kolb, 2005) was developed to assess systematically the adaptive competencies associated with learning styles (Kolb, 1984). LSP assesses the level of skill development in four skill areas, related to the four learning modes – Interpersonal Skills (CE), Perceptual/Information Skills (RO), Analytical Skills (AC), and Behavioral Skills (AE) (Kolb and Kolb, 2005: 28). It is a seventy-two item form, identifying 12 learning skills in these categories. *Interpersonal Skills* include leadership skills, relationship skills and the skills of helping and understanding people, *Perceptual/Information Skills* include sense-making skills, information gathering skills and information analysis skills, *Analytical Skills* include theory building skills, quantitative

analysis skills and technology management skills, and finally *Behavioral Skills* include goal setting skills, action skills and initiative skills.

Methodology

In the traditional view, the classroom symbolizes the assumption that learning is a special activity cut off from the real world and unrelated to one's own life. Learning and doing are separate activities (Kolb, Osland and Robin, 1995). We learn in class to get a grade. Not to link the material to the real life occasions. In direct contradiction to this view, in today's ever-changing business environment such a discontinuity in the education – employment experiences of an individual is unacceptable. In the perspective that the graduating students from an educational program are the outputs of that program and the organizations to hire these students as employees are the customers of the university programs, there should be a link between the education given to the students and the expectations of the organizations from these students. The skills and competencies earned by the students from an undergraduate program should be matching that of the current needs in the market. Actually, the ability to learn, itself is one of the most critical skills in today's organizational life.

If we can link the learning process of the students (what they learn, how they learn, why they learn) to the needs of the real world, the gap between the two will dissolve. In such a case the motivation for learning should come from the learner (if he can relate learning to his probable needs in the future, in his career life) not the instructor. Just as each individual's experiences are different, so are each person's learning goals and learning style. So learning environment should be individualized and self-directed (Kolb, Osland and Robin, 1995).

The research questions of this paper are: what are the dominant learning styles of the new students entering the program? What are the major skills expected by the market from the new graduates of the program? What are the ways to link the offers of the program with the needs of the market?

In an effort to learn the individual learning style of the students and the expectations of the organizations (those chosen by the students) to be able to build a link between them, the following research was designed in a two-level model with four stages. The first level is designed towards the students and will be completed in three steps:

- (1) LSI was applied to the first year new-entrant students in the Management program of Baskent University. The 121 valid inventory forms were assessed to calculate the dominant learning styles of the students.
- (2) The same students were given a career orientation survey, asking them to list the top three companies and/or institutions that they would be willing to work in. The aim of using such an open-ended survey was to be able to learn the goals of the students for their career lives after graduation.
- (3) The third step will be to measure the learning styles of the students at the end of their senior year, just before graduation to see the relative change in their learning styles with the effect of the education they have got in the management program.

The second level of the model is designed towards the professional managers in the market. A total of 99 managers were visited and given the LSP inventory asking them to fill out the forms, keeping in mind their expectations from the new graduates of a management program to enter their organization as new employee candidates. The goal of this part of the research is to determine the expectations of the sector from the new graduates in terms of skill and competency development.

Results

The results of the LSI applied to the new students are as follows:

Accommodator	Diverger	Converger	Assimilator
4 students (3.31%)	16 students (13.20%)	25 students (20.66%)	76 students (62.81%)

Table 3: Distribution of the dominant learning styles among the new students

According to the results, 62.81% of the students are in the assimilator quadrant of the learning cycle, indicating that they dominantly learn by abstract conceptualization and reflective observation. The second dominant learning style among the students is converging, meaning that these students learn by abstract conceptualization and active experimentation.

The results of the career orientation survey shows that the students prefer to start their own company or work in one of the following sectors; manufacturing companies, banks or entertainment/tourism companies.

Taking into consideration the results of the career orientation surveys, the second level of the research was done by using the LSP. The LSP survey was given to 99 professional managers in the companies chosen by the students themselves. To be able to cover different functional orientations in each company, one professional manager from the marketing department, one professional manager from the accounting/finance department and one professional manager from the administrative/human resource management (hrm) departments of the companies filled out the questionnaires. The distribution of the managers taking place in the sample is as follows and is rather evenly distributed.

Manufacturing firms	11 marketing	11 finance	10 hrm	32 total
Banks	14 marketing	11 finance	10 hrm	35 total
Ent. / Tourism firms	12 marketing	11 finance	9 hrm	32 total

Table 4: Distribution of the questionnaires filled out by the participants

The results were analyzed with two different perspectives. First the results of the questionnaires were examined according to the sectors. In the banking sector, the dominant skills needed are the interpersonal skills (5,75), whereas in the manufacturing sector, perceptual/informational skills (5,69) and in the tourism/entertainment sector the behavioral skills (5,70) are leading.

Secondly, the results were analyzed according to the functional areas of the managers. The finance managers indicated that perceptual/informational skills (5,57) were the most critical skills to do their jobs, whereas, the human resource managers need behavioral skills (5,88) and the marketing managers need interpersonal skills (5,96) the most.

Conclusion and Discussions

The main purpose of this paper is to present construct and present an organizational learning model for management education programs. Universities should be behaving as learning organizations in order to be able to adapt to the everchanging needs of the environment. The environment, specifically the organizations acting as the customers of the university programs, receive the new graduate students as their employees. In this case, as the customers of the progras the organizations have specific needs to be met by the university programs. On the other side, students have different individualized learning skills, specific to their own experiences. Students spend 4 years in the program, combining their own personal experiences with what they have derived prom the program together and their learning skills and other skills alter throughout the program. So, if we can measure the skills of the new

students entering the program and the skills of the same students when they are graduating from the program, we will be able to see the difference throughout the four years. On the other hand we can measure the expectations of the organizations (demand of the market) and compare the two sets of data to see if they match or not. Such a construct will present us the opportunity to develop alternative ways to match the offers of the management programs and the demands of the market.

Most parts of the above construct have been completed except the measurement of the skills of the graduate students. The results show that the new students entering the program dominantly use assimilator learning style. They are oriented towards abstract conceptualization and reflective observation. Knowledge results from the combination of grasping experience and transforming it (Kolb 1984:41). In the assimilative knowledge quadrant experience is grasped through comprehension and transformed through intention. The assimilators are good at creating theoretical models and inductive reasoning in assimilating disparate observations into integrated explanation. They are concerned about the abstract concepts and the practical use of the theories but not much interested in people.

On the other hand, the results of the LSP applied in different sectors and different functional areas of the professional organizations show that, bankers use interpersonal skills, manufacturing sector needs perceptual/informational skills and the tourism/entertainment managers are more into behavioral skills. In addition to these results, it is also seen that the finance managers use perceptual/informational skills, the human resource managers use behavioral skills and the marketing managers use interpersonal skills the most. Consequently, the groups using the interpersonal skills need to excel in leadership, relational skills and in skills of helping and understanding people, other groups using the perceptual/information skills need to develop sense-making skills, information gathering and analysis skills, the groups needing to use the analytical skills must ensure to obtain theory building skills, quantitative analysis skills and technology management skills, and finally the groups that use behavioral skills will need to develop goal setting skills, action skills and initiative skills.

With such knowledge, it is possible to offer the students with a variety of elective courses using different ways to develop the kinds of skills they will need in their choice of sector and functional area to work in their career lives. Developments in the curriculum to update the programs and the contents of the courses continuously will ensure the development of an organizational learning program. The continuous organizational development and renewal is the basis for organizational learning and the creation of organizational knowledge.

References

- Argyris, C. (1999). *On Organizational Learning*. Blackwells, Oxford.
- Argyris, C. and Schön, D.A. (1996). *Organizational Learning II*. Addison-Wesley, NY.
- Barnett, R. (1992). *Improving Higher Education: Total Quality Care*, Buckingham: SRHE&OU.
- Boyatzis, R. E., and Kolb, D. A. (1991a). *Learning Skills Profile*. Hay Group, Hay Resources Direct. Boston, MA.
- Boyatzis, R. E., and Kolb, D. A. (1991b). Assessing individuality in learning: The Learning Skills Profile. *Educational Psychology*, 11(3-4): 279-295.
- Boyatzis, R. E., and Kolb, D. A. (1995). From learning styles to learning skills: The Executive Skills Profile. *Journal of Managerial Psychology*, 11(1).
- Coffield, F., Moseley, D., Hall, E. and Ecclestone, K. (2004). *Learning Styles and Pedagogy in Post-16 Learning: A Systematic and Critical Review*. Learning and Skills Research Centre, London.

- DiBella, A.J., and Nevis, E.C. (1998). *How Organizations Learn: An Integrated Strategy for Building Learning Capability*. San Francisco: Jossey-Bass Publishers.
- Espejo, R., Schuhman, W., Schwaninger, M., and Bilello, U. (1996). *Organizational Transformation and Learning*. Wiley & Sons, England.
- Fiol, C.M. & Lyles, M. (1985). Organizational Learning. *Academy of Management Review*, 10:4, 803-813.
- Ginkel, H. V. (1995). University 2050: The Organization of Creativity and Innovation. *Higher Education Policy*. 8:4, 14-18.
- Henke, H. (2001). *Learning Theory: Applying Kolb's Learning Style Inventory with Computer Based Training*. Unpublished paper.
- Huber, G.P. (1991). Organizational Learning: The Contributing Processes and the Literatures. *Organization Science*, 2:1, 88-115.
- Kolb, D.A., Rubin, I.M. and McIntyre, J.M. (1979). *Organizational Psychology, A book of Readings*. Third Edition, Prentice-Hall, Inc., Englewood Cliffs, NJ.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- Kolb, D.A., Osland, J. and Rubin, I. (1995). *Organizational Behavior: An Experiential Approach*. 6th Edition, Prentice-Hall, Inc., Englewood Cliffs, NJ.
- Kolb, D.A. (2000). *Facilitators Guide to Learning*. Boston: Hay/McBer.
- Kolb, A.Y. and Kolb, D.A. (2005). *The Kolb Learning Style Inventory – Version 3.1*, Experience Based Learning System, Hay Group.
- Probst, G.J.B. and Büchel, B.S.T. (1996). *Organizational Learning: The Competitive Advantage of the Future*. London: Prentice-Hall.