

ORGANIZATIONAL LEARNING

Organizational Learning: An Evaluation of Relevant Literature

Syed Shahid Hussain

University of Management & Technology, Lahore

shahid.hussain@umt.edu.pk

Naveed Yazdani

University of Management & Technology, Lahore

spa.dir@umt.edu.pk

This paper has been presented in the



organized by

School of Business and Economics

University of Management and Technology, Lahore, Pakistan

This paper has been included in the conference proceedings with good intentions, where the conference and its organizers are not liable at all for the contents of this paper and / or any part of it. For more information about the conference please visit the conference website:

<http://cgr.umt.edu.pk/icobm2013/index.html> or write the organizers at icobm@umt.edu.pk

ABSTRACT

This theoretical study is an attempt to provide an overview of literature on organizational learning by covering the concepts of prominent scholars from Cangelosi and Dill (1965) to Fang et al., (2010). In the last two decades, the multi-facets of the concept have emerged in academic as well as in corporate world. The field of organizational learning can be considered in several perspectives and dimensions. The aim of the study is to evaluate the salient aspects of the field while exploring the different perspectives and approaches of organizational learning namely individual/cognitive, objective, technical, social, cultural, humanistic and political. This paper also expounds various processes like single-loop, double-loop and experiential through which organizations learn.

Keywords: Learning, Single-loop, Double-loop, Organizational learning, Collective learning, Superstitious learning, Competency trap.

INTRODUCTION

The history of learning is as ancient as existence of mankind. The concept of 'organizational learning' in the lexicon of organization theory can be traced five decades back by Simon and March, (1958). The concept had been under consideration since long period of time independently without having any connection with organizational theory. Later, Cangelosi and Dill (1965) worked on this topic in organizational context for the first time. Then it became common point of discussion and we came across the ideas of several prominent authors like Argyris and Schon (1978), Daft and Weik (1984), Huber (1991), Ulrich et al., (1994), Mabey and Salman (1995). There is growing literature on the concept of organizational learning in both the volume of publications (Crossan and Guatto, 1996) and acceptance of the concept (Dodgson, 1993). The researchers of 21st century like Hult et al., (2001), Teo and Wang, (2005) and Fang et al., (2010) also explored the different dimensions in the field of organizational learning.

Organizational learning faces two prevalent problems; confusion and over-simplification (Easterby-Smith et al., 1998). The confusion in this field is because of the entrance of a number of players from diversified disciplines and backgrounds having different points of view on the concept as represented in the table-1 below. Because of the diversification of ideas, the discussions turn around whether there should be common definitions of central concepts of organizational learning or the diversity of ideas should be encouraged?

The aim of the study is to evaluate the relevant literature from different aspects and encapsulate the different ideas, discussions and researches of the prominent scholars. The notion of organizational learning is now an integral part of both the academic and corporate

spheres. In the sphere of corporate world, several books (Pedler et al., 1989; Senge, 1990) have been written through which the concept has spread among the practitioners and business consultants alike. In the academic world the concept of organizational learning has been adopted by several disciplines of management and business underpinned by two basic ideas of its improvement capabilities; either incremental or radical changes (Miner and Mezias, 1996). There are several recurring deliberations occur within and across the disciplines, the two most common are being discussed. First, whether the organizational learning is better to perceive as individual/cognitive constructs (Argyris and Schon, 1978) or as social/cultural process (Cook and Yanow, 1993). The second widespread debate among the researchers and practitioners is whether the organizational learning is consider as objective and technical process or it is to be seen in humanistic and political perspectives. Scholars of organizational learning found out some hindrances in the way of organizational learning process like, superstitious learning, ambiguity of success and competency traps (Leavitt and March, 1988). Having introduced the concept of Organizational Learning the scheme of the study will further revolve around the following core ideas:

1. Literature Review
2. Defining the Organizational Learning
3. Processes of Organizational Learning
4. Learning as a Mode of Knowledge Acquisition
5. Learning as Information Sharing and Dissemination
6. Experiential Learning
7. Major Disciplines
8. Conclusion

LITERATURE REVIEW

Organizational learning has become a focal point of discussion in recent years. Although, a number of researchers have worked in this field, the concepts of the most prominent scholars of learning have been evaluated and summarized in the table as under:

Table 1: Concepts of Prominent Scholars of Learning

Researcher (s)	Year	Concept
Cangelosi and Dill	1965	The term organizational learning first time introduced in the thesaurus of management.
March and Olsen	1975	Concerned about the cognitive limitations of individuals who affect learning.
Argyris and Schon	1978 and 1996	Organizations are similar to individuals and collective learning depends on them; there are two types of learning, adaptive and generative. Provide the idea of single and double loop learning in mechanistic way.
Heberg	1981	Organizations are similar to individuals
Daft and Weik	1984	OL is knowledge between actions and its environment
Fiol and Lyles	1985	OL is concerned with the acquisition of new knowledge which influences the behaviors. Sharing and using the knowledge (explicit and tacit both) ultimately become the culture of the organization.
Prahalad and Bettis	1986	OL is single-loop, incremental
Levitt and March	1988	Experience curve is a powerful symbol of organizational learning. Organizations learn from their own experiences through trial-and-error and experiences of other organizations when they imitate their processes.
Stalk	1988	Gave idea of adaptive and generative learning
Leymann	1989	'OL hides who learn' and Individuals only can learn not organizations.
Senge	1990	The knowledge exists outside the individuals as they are connected with the shared vision and perspective of wholeness. Argues in favor of organizational memory. He emphasized the role of leadership. Managers should work as coaches instead of directors to create a learning environment.
Garratt	1990	Emphasized the role of managers should be like coaches instead of directors. Consequently an organizational climate will facilitate the individuals' learning.

Huber	1991	Single-loop, learning is incremental and based on individuals
Pettigrew and Whipp	1991	The main focus should be on “organizational capability” which is based on the hidden and unnoticed learning
Simon	1991	Individuals only can learn not organizations
Menon and Varadarajan	1992	Behavioral change is the link between organizational learning and its performance.
Watkin and Marsick	1993	
Garvin	1993	Learning creates behavioral change which leads corporate performance. Learning depends on individuals who lead and spread within the organization.
Cook and Yanow	1993	Contrary to cognitive, he presents cultural approach to organizational learning. Organizations learn not as individuals but as collective but knowledge still stick to the individuals.
Sinkula	1994	Organizational learning is a multi-facet process; information acquisition, information diffusion and joint implementation.
Ulrich et al	1994	Organizational learning increases the firm’s performance as time increases.
Jones	1995	Organizations are similar to individuals
Crossan, Lane, White and Djurfeldt	1995	Presented 4I’s model; three levels of learning; individual, group and organization.
Blackler	1995	Knowledge exists at five places, he calls knowledge as “knowing” is not a noun; it is a process and a verb, which can be accumulated.
Nonaka and Takeuchi	1995	Dissemination of knowledge makes the knowledge valuable for the organization.
Mabey and Salman	1995	Organizations learn collectively. OL is categorized in two main dimensions exploration (internally focused) and exploitation (externally focused)
Nevis et al.,	1995	Acquiring new knowledge and usage of existing knowledge is the part of learning culture
Hult and Ferrel	1997	OL is the expansion of knowledge or insight which has the prospective to influence behavior of individuals.
Easterby-Smith	1998	Summarized organizational learning in different disciplines of learning
Crossan et al.	1999	Organizational learning is the main source of organizational renewal. They described the organizational learning in four processes, known as 4I’s model; intuiting, interpreting, integrating and

		institutionalizing linking with three levels; individual, group and organizational.
Argote	1999	Getting and storing new knowledge in organizational memory facilitates to acquire new knowledge.
Hult et al	2001	Organizational learning is the knowledge and the capacity to develop knowledge within the organization.
Shin/Zhou	2003	Supportive, empowering and transformational leadership behaviors have positive influence on organizational learning (empirical evidence).
Aragon-Correa et al., Llorens Montes et al.	2005	Supportive, empowering and transformational leadership behaviors have positive influence on organizational learning (empirical evidence).
Teo and Wang	2005	Five aspects of organizational learning; climate for learning orientation, system orientation, knowledge acquisition and utilization orientation, information sharing and finally information dissemination orientation.
Burke et al., Kurland/Hertz- Lazarowitz	2006	Supportive, empowering and transformational leadership behaviors have positive influence on organizational learning (empirical evidence).
Kahan	2006	Experiences are very important which should be shared and utilized in different parts within the organization (importance of tacit knowledge).
Fang et al.,	2010	Organizational learning increases firm's corporate performance

The table above shows that the concept of organizational learning evolved across the disciplines very rapidly. In subsequent sections the paper will further explain and discuss main concepts, perspectives and approaches of organizational learning derived from the ideas of prominent theorists and researchers.

Defining Organizational Learning

The concept of organizational learning can be viewed through two main theoretical perspectives; modernists and postmodernists. The former is associated with open system

theory of organizations following the path of natural sciences. Modernists (in 1960s) are of the points of view that organizational learning is like a self-regulated cybernetic system like management information system, performance evaluation and budgeting (Hatch, 1997, p. 371). Argyris and Schon (1978) supports this idea by introducing single-loop learning system and define the concept as “detecting and correcting errors in the existing process and embedding the results / knowledge into the system”. Later, they challenged their own single-loop learning concept and stated that organizations learn through double-loop system. The postmodernists define the term organizational learning alternatively as socially constructed concept which is an art contrary to the modernists’ view of natural sciences. Many postmodern theorists have defined the term organizational learning in different ways.

Tsang (1997) explains that the organizational learning is a process which is comprised on certain types of activities that happen in an organization. Organizations learn through past history by making improvements in the previously taken actions (Fioland Lyles, 1985). Crossan et al., (1999) define the concept differently and highlight the strategic perspective. They argue that the organizational learning is the main source of achieving the strategic-renewal in an organization.

Organizations learn along with experience or learning-curve involuntarily (Leavitt and March, 1988). This type of learning is known as competency and competitive advantage of an organization depends on the tacit knowledge (Stata, 1989). Leavitt and March (1988) further explain that organizations can learn through direct and indirect experiences. The former is through trial-and-error technique and indirect experience is like imitating the best practices of the other organizations. They are also of the point of view that the organizational learning is a

cultural process which takes place through stories, rituals, norms, traditions and linguistic symbols.

According to Daft and Weik, (1984) organizational learning is the knowledge between actions and environment of the organization. Ulrich et al., (1994) and Fang et al., (2010) empirically proved that the organizational learning increases the performance of the firm with the time-line. This perspective is also emphasized by Mabey and Salman, (1995) that organizations learn collectively according to their capacity, pace and intensities. They argue that learning normally has positive effects on performance. Huber, (1991) emphasizes the behavioral aspect of organizational learning as the potential behaviors are expanded by processing of information. According to Hult et al., (2001) organizational learning is the knowledge and the capacity to develop knowledge within the organization. Teo and Wang, (2005) discussed the different facets of organizational learning as system orientation, climate for learning orientation, knowledge acquisition orientation, information sharing and finally dissemination orientation.

PROCESSES OF ORGANIZATIONAL LEARNING

The literature can be best described on the processes by emphasizing on three different foci points; fundamental assumptions for organizational actions, experiential learning and information processing cycle of knowledge acquisition. Likewise, Sinkula (1994) discussed the process of organizational learning into three steps; includes information acquisition, information dissemination and shared implementation. The information can be acquired through; direct experience, others' experience and from organizational memory. It is further

categorized in two main dimensions; exploitation means to utilize the internal resources, existing procedures and knowledge while exploring new knowledge from external sources to bring innovation (Mabey and Salman, 1995). Crossan et al., (1999) describe organizational learning process through their well-known 4I's model includes; Intuiting, Integrating, Interpreting and Institutionalizing, linked with three levels; Individual level, Group level and Organization level. The frequently used concepts of organizational learning in the literature are briefly discussed in the subsequent sections.

Single-Loop and Double-Loop Learning

Organizational learning is hypothesized in the literature to be concerned with the growth of new knowledge or insights that have the ability to stipule the behaviors (Fiol and Lyles, 1985; Sinkula, 1984). The literature indicates two most cited types of learning; adaptive and generative learning that have been underpinned the concepts of single-loop and double-loop learning respectively (Argyris, 1987; Leonard-Barton, 1992; Stalk, 1988).

Adaptive Learning

Adaptive learning is also known as single-loop learning. This form of learning is the most common one employed in majority of organizations. This kind of learning is sequential, incremental, and traditionally concentrated on problems and prospects (Prahalad and Bettis, 1986). The idea of such type of learning is underpinned by self-regulatory cybernetic system based on negative feedback. It is about detecting and correcting mistakes from previously taken actions according to the built-in capacity of the system. This self-regulatory system can be best understood by assuming the working mechanism of thermostat in an air-conditioner. The thermostat within the air-conditioner maintains the room temperature automatically as set by

the user from outside. Adaptive or single-loop learning process like air-conditioner points out and rectifies the problem only based on the set standards and procedures underpinned by negative feedback. It addresses the question of 'what' and its solution but it does not raise the question of 'why' to explore the underlying assumptions of the problem. This is linear system based on if-then rule which has no capacity to change the behavior of the system by itself.

Generative Learning

Generative learning or double-loop learning occurs when organizations challenge its long-held assumptions about its mission, strengths, values, culture, and looking for new ways of development to understand the relationships and systems that are relevant to the issues and events. Slater and Narver (1995) found in their research that the generative learning is more effective for organizations to sustain competitive advantages than adaptive learning. Argyris and Schon (1978) are the main advocates of generative or double-loop learning concept. They argue that the double-loop learning fallouts in a profounder level of knowledge. They describe that the individual learning is the basis of organizational learning but it is inadequate condition for the process. They suggest that the individuals should disseminate and share their knowledge within the organization and individual learning must be embedded into the organization's memory to incorporate it in the processes and practices. But the way they presented both the ideas of single-loop and double-loop learning still reflects cyclical and mechanistic fashion.

Learning as a Mode of Knowledge Acquisition

Crossan et al., (1999) define the concept of organizational learning as “the main source of achieving the strategic renewal of an organization”. The strategic renewal is identified by March (1991) as tension between exploitation and exploration. According to him the renewal is exploring and learning new knowledge while using the existing knowledge and ways what they have already learned (exploitation). Acquiring new knowledge and usage of existing knowledge is the part of learning culture (Nevis et al., 1995; Marquardt, 1996; Teo and Wang, 2005). Nonaka and Takeuchi (1995) specified that the acquisition of knowledge has loop effect as the total knowledge of the organization is greater than the sum total of knowledge of the individuals. It has also been argued favorably in the literature that getting new knowledge and storing it in organizational memory facilitates to acquire new knowledge (Huber, 1991; Argote, 1999).

Learning as Information Sharing and Dissemination

One of the important dimensions of the learning capacity or getting new knowledge is the communication with other individuals, groups, teams, departments and organizations (Teo and Wang, 2005; Sinkula, 1994). The importance of knowledge sharing has also been emphasized by Huber (1991) as reaching the information from different sources spread the organizational learning concept. Nonaka and Takeuchi (1995) describes that the dissemination of information make the knowledge valuable for the organization. Researchers are consensually agreed that without information sharing and its dissemination, the absorption of knowledge within the organization is not possible. The experiences of individuals are important which

should be tacitly shared and utilized in different parts within the organization (Kahan, 2006). Literature also highlights the importance of learning culture within the organization to exercise the practices effectively as mentioned above by the prominent authors and researchers.

Organizational Culture

One of the basic components for organizations to learn is its culture and environment. Literature describes that the Learning Culture depends on the four basic attributes; empowerment, developmental needs of learning, satisfying learning as well as developmental needs, and implementation of learning at workplace (Armstrong and Foley, 2003). Sharing and using the knowledge (explicit and tacit both) across the organizational hierarchy ensures that the new technologies and other environmental conditions are being adapted which ultimately become the culture of the organization (Huber, 1991; Nevis et al., 1995; Hult and Ferrell, 1997; Teo and Wang, 2005).

EXPERIENTIAL LEARNING

Pettigrew and Whipp (1991) criticize the ideas of single and double-loop learning and argue that the main focus should be on “organizational capability” underpinning by the hidden and unnoticed learning. The hidden and unnoticed learning is basically an experiential learning or tacit knowledge. The experiential learning which has been discussed above, takes place in two ways i-e, direct and indirect ways. The direct organizational experience change routines and beliefs of individuals through trial-and-error experimentation in daily routine practices within the organization. If the objectives are achieved under this type of experimentation, the organization increases the use of such routine practices (Cyert and March, 1963) otherwise starts thinking alternatively.

The alternative method is 'organizational search' or learns indirectly from others' experience. Organizational search is the use of alternative practices and procedures contrary to the trial-and-error technique in the routine procedures. If organization discover better alternative, it is adopted which leads a new change opposite to the routine change which has been seen formerly in trial-and-error case (Radner, 1975). Both the ways of experiential learning have described by Miner and Mizias (1996) as incrementalists and radicals views respectively. The incrementalists view or trial-and-error method is very common and useful in organizations. Organizations mostly spend their time on continuous and gradual improvement of their products in response to the feedback of their customers, clients, and employees (Levinthal and March, 1993; Miner, 1990). The organizations that use the alternative approach of indirect experience either by using different techniques or by imitating other organizations' processes get competitive edge. This sort of organizational approach is known as competency trap. Argyris and Schon (1978) presented the idea of radical change first time by emphasizing on double-loop learning concept. They suggested that organizations should create capability of double-loop learning to create sustainable competitive advantage. The radical or indirect experiential learning occurs in an innovative environment where every member's opinion is valued. Therefore it is core responsibility of an organization to empower the individuals and provide them a learning environment regardless the hierarchical constraints. Organizational learning is not a simple and linear process rather it is a complex system which has many constraints, barriers and difficulties. Leavitt and March (1988) point out some of the difficulties as under.

SUPERSTITIOUS LEARNING

If there is an unjustified or incorrect connection between actions and its respective outcomes, this is known as superstitious learning. For instance in organizations, the promotions of employees are generally considered the indicators of their high level performance and achievements. But at time these promotions are the result of the replication of the characteristics and act of their leaders regardless the actual mission and vision of the organization. Authenticity of right and wrong has also of no importance. Therefore it does not reflect the true learning rather this misattribution leads the employees towards overestimation of their ability and they perform in the same way in future (Leavitt and March, 1988).

Ambiguity of Success

In today's turbulent environment and situations targets and objectives do not remain fixed but keep on changing on contingent basis. If objectives and targets keep on moving, the scale of measuring success has to be tailored persistently. Therefore mostly organizations fail to estimate their success accurately. Learning is usually based on the successful history of past events and actions. If there is an ambiguity in measuring success, it is not possible to learn properly (Leavitt and March, 1988).

Competency Traps

Usually organizations focus on improvements in existing frequently used procedures and practices as discussed above. If it results into success then this improvement style is further reinforced and continued. But if competitors introduce some better procedure/practice, the organization may be mesmerized into competency trap because of its own incremental learning belief. Argyris and Schon (1978) emphasized on radical concept of learning instead of

depending only on incrementalists' points of view. Easterby-Smith et al., (1998) stressed on the need of cross-disciplinary study of organizational learning.

MAJOR DISCIPLINES

Organizational learning has been developed into various disciplines based on different key ideas and their respective ontologies as shown below (Easterby-Smith et al., 1998):

Table 2: Disciplines of Organizational Learning

Discipline	Ontology	Key Ideas
Psychology and OD	Human Development	Cognitive organization; development; communication and dialogue
Management Science	Information Processing	Knowledge; memory; feedback; error correction
Organization Theory	Social Structure	Effects of power and hierarchy; conflict and interest; ideology and rhetoric
Strategy	Competitiveness	Organization/environment interface; learning between organizations
Production Management	Efficiency	Learning curves and productivity; design to production time
Cultural Anthropology	Meaning System	Culture as cause and effect of organizational learning; values and beliefs

Source: Easterby-Smith, M., Snell, R. and Gherardi, S., (1998). Organizational Learning: Diverging Communities of Practice? *Management Learning*, 29(3), 259-272

Although the disciplines mentioned above in the table-2 do not cover all aspects of organizational learning but with the evolution of the field, existing ideas can be applied to new emerging problems. The researchers and companions of related fields can start importing these ideas into their practices and researches. Though all the disciplines have their distinct communities of practice but two persistent debates arise within and across the disciplines. The first debate is about organizational learning as individual/cognitive constructs versus social/cultural process. As table-1 shows that the ideas of earlier authors of learning like Argyris and Schon (1978), March (1991) and Huber (1991) revolve around the individualistic/cognitive

approach. They argue that the individuals are the only source of learning who learn, develop the meanings and disseminate their knowledge within the organization. They are introducers and supporters of single-loop and double-loop learning in a cyclical and mechanistic way.

Contrary to the individualistic approach, Cook and Yanow (1993) prompt that the individual learning theory itself is incomplete; it cannot find clear justification of new ideas to be acceptable to the society or organization. They argue that the organizational learning starts from group level as the collective actions of a group are able to acquire, sustain or change the inter-subjective meanings of the ideas of individuals and make them legitimate and acceptable. Many other researchers and authors have also supported the concept of collective learning where every member of an organization can learn from each other (Gherardi et al., 1998; Richter, 1998; Araujo, 1998).

The second recurrent debate among the researchers and practitioners is whether organizational learning is to be considered as objective/technical process or it is best understood in humanistic and political perspectives. The former idea concentrates on data and information processing which is dependent on suitable learning technology. It is based on objective socio-technical perspective which is the rapid growth of computer software envisioned to support the field like decision–support system, and conferencing systems. Initially several computer softwares were formulated to support operational functions but afterward more were altered gradually to facilitate both individual and group level learning. Humanistic and political perspectives focus on non-rational inter-subjectivity of individuals that are about the hidden motives, emotions, semantics and political intentions of human and organizational

behavior, (Coopey, 1998). Nonaka (1995) names this phenomenon as tacit knowledge which is underpinned by experiences of the individuals.

In humanistic and political perspective even for overall learning environment the leadership has an important and vital role. Senge (1990) pointed out the importance of leadership for learning culture (table-1), now in recent years from 2000 onwards, the role of leadership has proved empirically and has become indispensable for establishment of learning culture in any organization (Shin/Zhou, 2003). The research has also proved empirically that the organizational learning has positive impact on firm's financial as well as non-financial performance (Fang et al., 2010).

CONCLUSION

Organizational learning is as important as 'learning' itself which roots into the existence of the mankind. This field has drawn attention of researchers, academicians, practitioners, theorists and scholars over the last five decades. The paper reviews and evaluates the ideas of prominent scholars to understand the concept of organizational learning in different disciplines, aspects and perspectives. The field of organizational learning is divided into two main epochs, modernists and postmodernists. According to the modernists' approach the organizational learning is an objective, technical, individualistic and cognitive phenomenon. It can be observed and treated like natural sciences. But postmodernists' approach is entirely opposite they consider it as an art underpinned by the socially constructed concepts of collectivism, humanistic and political perspectives.

Organizational learning is a process based on three stages; information acquisition, information dissemination and shared implementation of knowledge. This field is not a simple and easy process but there are many barriers in developing the learning environment within the organization. The researchers are persistently distributed in two ubiquitous discussions confusion and over-simplification (Table-1). Some of the experts are in the favor of establishment of some common definitions and argued that these common definitions and languages will benefit the cumulative development of the field (Shrivastra, 1983; Huber, 1991). Others are in favor of over-simplification and argue that the different concepts as a conceptual diversity are better to promote the field. Diverse disciplines have different ontologies which will not be helpful to any forceful integration of any field. They express that this field will progress more if the degree of focus is continued within the separate sub-areas. Seemingly the tendency

of the field is towards over-simplification. The problem with diversified concepts may arise when one fails to fully understand the concepts borrowed from other disciplines, individuals or groups along with their underlying assumptions and semantics. After evaluating and coming across the diversified ideas, concepts and discussions the following few points may be crucial for future research:

1. The concept valid in America or Europe or at one place may not be valid at other places. Therefore indigenous research in this field is necessary to bring localness to this concept.
2. A scant research has empirically proved that the supportive, empowering and transformational leadership behaviors have positive influence on organizational learning (Shin/Zhou, 2003). This study invites the researchers to explore the missing link between leadership styles and organizational learning as Crossan et al., (1999) and Senge (1990) have emphasized on this issue.
3. The literature accentuates frequently that every member of the organization across the organizational hierarchy should take interest in learning process (Armstrong and Foley, 2003). But due to fear of powers and controls, elite of the organization including owners, CEOs and top management hinders to promote such learning culture. The study suggests that the change should be at strategic level as Crossan et al. (1999) names it strategic renewal.
4. The concept is now tilting towards knowledge creation and knowledge management as Nonaka has provided knowledge creation theory of knowledge spiral. There is a missing

link between organizational learning and knowledge management which needs to be developed in future research.

REFERENCES

- Abbas et al., (2011). Measuring the Learning Organization's Construct in Pakistan: A Case of Public Sector Educational Institutes. *European Journal of Social Sciences*, 18(4), 574-581.
- Aksu, A., and Ozdemir, B. (2005). Individual Learning and Organization Culture in Learning Organizations. *Managerial Auditing Journal*, 20(4), 422-441.
- Amitay, M., Popper, M., and Lipshitz, R. (2005). Leadership Styles and Organizational Learning in Community Clinics. *The Learning Organization*, 12(1), 57-70.
- Argyris, C., Schon, D. (1978). *Organizational Learning*. Reading: MA: Addison-Wesley.
- Cangelosi, V. E. and Dill, W. R. (1965). Organizational Learning: Observations toward a theory. *Administrative Science Quarterly*. 10, 175-203.
- Crossan, M. and Guatto, T. (1996). Organizational Learning Profile. *Journal of Organizational Change Management*, 9(1), 107-112.
- Crossan, M. M., Lane, H. W. and White, R. E. (1999). An Organizational Learning Framework: From Intuition to Institution. *Academy of Management Review*, 24(3), 522-537.
- Daft R. L. and Weick, K. E. (1984). Toward a Model of Organizations as Interpretation Systems. *Academy of Management Review*, 9, 284-295.
- Dixen, N. (1994). *The Organizational Learning Cycle: How we Can Learn Collectively*. Maidenhead: McGraw-Hill.
- Dodgson, M. (1993). Organizational Learning: A Review of Some Literatures. *Organizations Studies*, 14(3), 375-394.
- Easterby-Smith, M. (1997). Disciplines of the Learning Organizations: Contributions and Critiques. *Human Relations*, 50(9), 1085-1113.

- Easterby-Smith, M., Snell, R. and Gherardi, S. (1998). Organizational Learning: Diverging Communities of Practice? *Management Learning*, Sage Publication, 29(3), 259-272.
- Garvan, T. (1997). The Learning Organization: A Review and Evaluation. *The Learning Organization*, 4, 188-29.
- Gherardi, S., Nicolini, D. and Odella, F. (1998). Toward a Social Understanding of How People Learn in Organizations: The Notion of Situated Curriculum. *Management Learning*, 29(3), 273-297.
- Herriott, S. R., Levinthal, D. and March, J. G. (1985). Learning from Experience in Organizations. *American Economic Review*, 75, 298-302.
- Hatch, M. J. (Ed.).(1997). *Organization Theory*. Great Clarendon Street: Oxford University Press.
- Isaacs, W. N. (1993). Taking Flight: Dialogue, Collective Thinking and Organizational Learning. *Organizational Dynamics*, 22(2), 24-39.
- Kitapci, H., Aydin, B. and Celik, V. (2012). The Effects of Organizational Learning Capacity and Innovativeness on Financial Performance: An Empirical Study. *African Journal of Business Management*, 6(6), 2332-2341.
- Leavitt, B. and March, J. G. (1988). Organizational Learning. *Annual Reviews Social*, 14, 319-340.
- Leitch, C., Harrison, R., Burgoyne, J., and Blanter, C. (1996). Learning organizations: The Measurement of company performance. *Journal of European Industrial Training*, 20, 31-44.
- Levinthal D. A. and March J. G. (1981). A Model of Adaptive Organizational Search. *Journal of Economic Behavior and Organization*, 2, 307-333.

- Levinthal, D. A. and March, J. G. (1993). Exploration and Exploitation in Organizational Learning. *Strategic Management Journal*, 14 (Winter), 95-112.
- Lipshitz, R., Popper, M., and Oz, S. (1996). Building Learning Organizations: The Design and Implementation of Organizational Learning Mechanisms. *The Journal of Applied Behavioral Science*, 32(3), 292.
- March J. G. and Olsen, J. P. (1975). The Uncertainty of the Past: Organizational Learning Under Ambiguity. *European Journal of Political Research*, 3, 147-171.
- Moingeon, B. and Edmondson, A. (Ed.).(1997). *Organizational Learning and Competitive Advantage*. London. Sage.
- Morgan, G. (Ed.). (1986). *Images of Organizations*. London. Sage.
- Mayo, A., and Lank, E. (1997). *The Power of Learning: A Guide to Gaining Competitive Advantage*. UK: Institute of Personnel and Development.
- Nonaka, I, and Takeuchi, H. (1995). *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford: Oxford University Press.
- Ortenblad, A. (2001). On Differences Between Organizational Learning and Learning Organization. *The Learning Organization*, 8(3), 125-133.
- Pedler, M., Boydell, T. and Burgoyne, J. (1991). *The Learning Company: A Strategy for Sustainable Development*. Maidenhead: McGraw-Hill.
- Prahalad, C. K. and Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, 68(3), 79-91.
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization* New York: Currency: Doubleday.

Shrivastava, P. (1983). A Typology of Organizational Learning Systems. *Journal of Management Studies*, 20(1), 7-28.

Slater, S. F. and Narvar J.C. (1995).Market Orientation and Learning Orientation. *Journal of Marketing*, 59(3), 63-74.

Tsang, E. W. K. (1997). Organizational Learning and the Learning Organization: A Dichotomy Between Descriptive and Prescriptive Research. *Human Relations*, 50(1), 73-89.

Zagorsek, H., Dimovski, V. and Skerlavaj, M. (2009).Transactional and Transformational Leadership impacts on Organizational Learning. *JEEMS*, 2, 144-165.