Exploring Characteristics of a Learning Organization as Learning Environment

Solveiga Skuncikiene, Rasa Balvociute, Sigitas Balciunas

Siauliai University

Abstract

Today many organizations seeking for economically successful performance in the ever-changing environment are supposed to follow the concept of a learning organization, i.e., to develop and maintain corporate learning culture, to promote personal excellence of their employees, open communication and cooperation, and to encourage them to share experience and act without feeling fear of failure. Scientific research tends to focus on the analysis of teaching and learning processes, search for effective learning techniques leading to fulfilment of the established learning needs.

This paper presents analysis of a learning organization concept from the theoretical viewpoint with the aim to determine key characteristics of a learning organization as learning environment.

Keywords: organization, learning organization, learning of employees, learning environment.

Introduction

Relevance and research problem. Success of business of any organization depends on many different factors, the most important of them being the process of learning that not only ensures existence of the organization but also determines innovation process within operation and management of the organization (Kvedaravicius, Lodiene, 2002). Development of the organization is seen as specific process, as augmentation of socio-cultural systems, desires, aims, expectations, goals, agreements and their achievement potential based on internal (but not external) resources (Zakarevicius, Kvedaravicius, Augustauskas, 2004). Continuous learning is the prerequisite for development. Understanding necessity for continuous changing and learning any organization that seeks to be flexible and innovative must develop its own employee learning system enabling to select the most appropriate strategy for their skills and competencies formation. Scientific literature suggests that any organization universally acknowledging and encouraging learning and having specific learning culture can be identified as learning organization.

Analysis of different concepts of a learning organization enables to envisage two more or less interrelated components: the static component of organisation of learning and conditions promoting it, which is generally understood as learning environment; and dynamic component of learning, improving, new experience gaining or in other words component of development, no matter whether we speak of learning in terms of an individual, group of individuals or the whole organization.

This paper involves comprehensive analysis of a learning organization concept with the aim to reveal key characteristics of it as learning environment. Here, learning environment is treated as the space where a learner through interaction with sources of information and other individuals and by acting constructively, voluntary, consciously, purposefully and reflexively, gains knowledge, skills and values (Juceviciene, Tautkeviciene 2004). A learning organization is analyzed as the environment where learning of employees takes place. Consequently, the question is: what are the characteristics that define learning organization as learning environment, and what are the factors of this environment distinguished by members of the organization?

Subject of this research paper: a learning organization as learning environment.

Aim of this research paper: is to perform analysis of the concept of learning organization and empirically disclose and assess typical characteristics of a learning organization.

To achieve this aim the following *objectives* were set:

- to describe learning organization as learning environment by analyzing characteristics of learning organization distinguished by different authors;
- to perform analysis of learning organization characteristics correlating them with the concept of learning organization on the basis of empirical research.

Research methods: analysis of scientific literature using operations of analysis and synthesis, comparison and systematization, questionnaire survey, and the following methods of statistical data analysis: ANOVA and T-test, correlative and factor analysis.

Analysis of a learning organization as learning environment

In modern extremely rapidly changing environment, organizations discover that available knowledge is no longer sufficient for their quick response to changes and decision-making. According to Macneil (2001), competitive advantage is acquired by those organizations, which are able to learn faster and use their knowledge – human – resources more efficiently than their competitors. As knowledge is constantly changing, ability to learn possessed by an individual or organization – i.e., ability to identify knowledge, assimilate new ideas, and put them into practice faster than competitors – has a direct impact on competitive advantage, development and survival in the market (Simonaitiene, 2003).

Almost the whole human life is spent in various organizations; therefore it is important to define the very concept of the organization. Many authors in the field of management agree that organization is a group of two or more people working together under particular structure towards the aim or the set of aims (Seilius, 1998; Sakalas et al., 2000; Zakarevicius, Kvedaravicius, Augustauskas, 2004). According to Senge (1990), organization represents a particular social system with its goals and limits that separate its internal environment from the external one and give explicit structure for activities of its members. Pundziene (2002) suggests that every organization goes through the cycle of ontogenesis (i.e., development of the individual organism – the set of changes from its birth till death) and philogenesis (i.e., historical development of its organs (its systematic groups - types, classes, kinds, etc) within the organism) that are typical for all the organizations and also experiences individual cycle, which is dependent on the period of time, geographical location and other events, and is characteristic only for a particular organization. This is how new forms and types

of organizations develop. At the end of the twentieth century, when describing modern organizations the concept of a continuously learning organization emerged. The concept of a learning organization and its model was first formulated and introduced into management theory by Senge (1990), while Argyris (1997) describing learning organizations emphasized the importance of learning.

Different terms for description of the same object or phenomenon are often used in literature such as "learning organization", "organizational learning", and "organization learning to learn". According to Zakarevicius, Kvedaravicius, Augustauskas (2004), the concept of a learning organization is closely related to the concept of a developing organization, as development of organization is inseparable from its learning and competence enhancement. Foreign literature uses the term *Learning Organization* that can be interpreted as "the organization that learns" (i.e., learning organization) or "organizational learning". For the purpose of this paper the term *Learning Organization* was adopted.

Scientific literature acknowledges learning organization to be the opposite of a traditional bureaucratic organization, since learning organization is described as flexible and encouraging personal excellence and mastery, open communication and teamwork; its employees are not afraid to make a mistake because mistakes are tolerated as inseparable part of learning process. Here, hierarchy is replaced by mutual cooperation, and values such as honesty, trust and tolerance prevail. A learning organization is able to adapt to changing conditions, predict changes and challenges in a continuously changing economic, cultural, and political life which is possible only through change in organizational culture including its internal structures and processes that support this trend. With reference to Hitt (1995), the main characteristics of traditional and learning organizations are presented below (see Table 1).

Table 1

Characteristics	Traditional Organization	Learning Organization	
General values	Utility	Excellence and mastery	
		Organizational renewal	
Style of management	Control	Assistance	
		Training	
Strategy. Action plan.	"Top-down" approach	Everyone is consulted	
	Road map	Learning plan	
Structure	Hierarchy	Flat structure	
		Dynamic networks	
Characteristics of personnel	People who know (experts)	People who learn	
	Knowledge is power	Mistakes are tolerated as inseparable part of learning	
Exceptional skills of personnel	Applicable learning	Generative learning	
Evaluation system	Financial performance	Financial and non-financial performance measures	
	measures		
Teams	Work groups in separate	Cross-functional teams	
	functional departments		

Typical characteristics of traditional and learning organizations

Source: table prepared by authors of the paper with reference to Hitt (1995).

Accordingly, learning organization can be understood as the model of organization enabling to ensure the ability to flexibly and efficiently respond to changes in environment, and develop individuals capable of consistent participation in the process of learning. However, implementation of learning organization model is a difficult task and one of the underlying reasons is the absence of a single learning organization concept (Pundziene, 2002).

In Lithuania, Simonaitiene (2003), Juceviciene (2007), etc. have been studying educational and scientific institutions as learning organizations, nevertheless only a few studies of business and manufacturing companies as learning organizations are available. Conceptual and methodological validation is missing; there is a lack of establishment of the system of necessary methods and feasibility studies.

Considering global trends of education systems expansion and concepts for increasing efficiency of organizational operation, it is necessary to develop research of manufacturing and business companies as learning organizations. In Lithuania, this field is being studied by Pundziene, Dienys (2003), Balvociute, Bakanauskiene (2004; 2007), Zakarevicius, Kvedaravicius, Augustauskas (2004), Bukantaite, Lauzackas (2004), Juceviciene (2007), etc.

Since year 2000, when the Commission published its Memorandum on Lifelong Learning in Lisbon, continuous learning and learning organization has been included in the policy of European Union (EU) and its associated member states, and is now being realized through both national and EU efforts. According to Augustinaitis (2002), many learning organizations develop as "learning laboratories" around the core idea that working environment and processes must be reorganized in the way making integration of learning and work possible. The concept of a learning organization is treated differently in different literature sources. Some authors believe that every member of a learning organization is actively involved in learning by collaborating with other members of the team and constantly analyzing work processes and performance. Then structures and processes are collectively improved, new knowledge and skills are acquired (Edmondson, Moingeon, 1998). Continuous learning and improvement allows gaining new experience that is necessary for organizational structures, processes and culture, and becomes the experience of the whole organization.

Hale (1996) emphasized the following as typical characteristics of a learning organization: standard rates for accomplishment of particular tasks are defined based on personal values; performance of every member in the organization is assessed by his/ her colleagues-professionals but not by direct manager; focus on identification and solution of problems; open and constructive communication; values promoted by the organization are well communicated internally and do not contradict to beliefs of its employees; authority is given as a means for development of individual's potential; workplace is a place of learning too; employees are constantly learning how to learn together. With reference to work of Huber (1991), the following four interrelated components of learning organization must be distinguished: knowledge acquisition, information sharing and interpretation, and organizational memory. According to this author, learning must not be conscious and intentional.

Scientific literature analysis allowed us to observe that one of the main aspects of the learning organization concept is adaptation to current changes and ever-changing environment. This adaptation is believed to guarantee development, progress, competitiveness, and represents one of the preconditions for fulfilment of the needs of ever-changing society (Pundziene, 2002; Bukantaite, Lauzackas, 2004).

Lithuanian Labour Market Training Authority (2003) defines a learning organization as an organization that creates environment suitable for its employees, provides them with occupation and opportunities leading to improved individual and group-learning, and is constantly changing by integrating learning, opportunities and organizational development. According to Garvin (1993), a learning organization can be defined as an organization that has accumulated adequate competence to generate, acquire and transfer knowledge, and also to change its behaviour while adapting to new knowledge and understanding. As Zakarevicius, Kvedaravicius, Augustauskas (2004) suggest, learning organizations include such organizations where continuous process of employee improvement presupposes development of the whole entity. Higher aims and better possibilities of individuals reflect higher level of their development, as better developed people set higher aims and build better opportunities for the organization, which in turn means development of the organization, and better developed organizations determine far higher aims of and opportunities for the whole economic system. From the viewpoint of Shibley (2001), group-work in teams creates preconditions for development of learning organization which is a result of the collective activity and reflection - of experience reflection and analysis.

Johnston, Hawke (2002) suggest that organizations maintaining environments of a learning organization have inbuilt better communication among employees, cross-functional cooperation, information availability and sharing that are directly concerned with more creative problem-solving. According to Figgis, Alderson, Blackwell, Butorac, Mitchell, Zubrick (2001), it is relevant to analyze a learning organization as learning environment since learning organization focuses on the process of learning at all the levels: individual, group and organizational level. Learning in such an organization is understood as spontaneous process which is maintained and supported by building learning culture, ensuring conditions for everyone to learn and to share information, experience and knowledge. Employees are trained by using innovative teachinglearning techniques that correspond to their learning needs, and goals of learning are related to their career goals and corporate strategy; organization has implemented system of material incentives for improvement, environment within organization encourages and stimulates employees to undertake initiative and risks, and employees are willing to solve problems together.

Comparative analysis of scientific literature sources revealed many different interpretations of the learning organization concept that are presented in Table 2 with distinguished typical characteristics.

Table 2

Main charac	teristics of learning organization as learning environment				
Author Main characteristics					
Beck (1989)	Organization facilitates learning and personal development for everybody; learning is associated with transformation of the organization.				
Senge (1990)	A system of continuous learning with environment favourable for knowledge creation and generation.				
Handly (1991); Pedler, Burgoyne, Boydell (1991)	Every task gives an opportunity to learn in the organization. Every member of the organization sees learning as his/her right and duty.				
Pedler, Burgoyne, Boydell (1991)	Organization supports learning.				
Watkins, Marsick (1992)	Learning and work are mutually supportive, integrated, continuous processes; learning is a strategic goal; organization has attitude that learning determines changes in individual and collective perception, thinking, behaviour, attitudes, values, beliefs, systems, strategies, policies, and procedures.				
Flood (1993); Garalis (2003); Kudokiene (2005)	Learning is understood as central value of organizational culture.				
Dixon (1993); Marquardt (2001)	Learning within organization takes place at three different levels: individual, team and system. Those levels link learning environments.				
Senge, Roberts, Ross, Smith, Kleiner (1994)	Possibility to reflect, continuous examination of own experience and practice.				
Argyris, Schon (1996)	Practices, systems and structures are established in order to enable meta-learning.				
Nevis, DiBella, Gould (1996); Hale (1996)	Learning system and complex of agreements among people is in place within which learning takes place. Employees are continuously learning how to learn together.				
Argyris (1997)	Analysis of solutions and correction of faulty decisions comprises a part of learning.				
Easterby-Smith (1997); Huysman (1996); Ortenblad (2001)	Organization emphasizes importance of learning processes.				
Simonaitiene (2003)	Learning organization provides employees with opportunities to continuously expand their competencies; open and innovative models of thinking are being elaborated, collective aims are freely developed, and employees constantly learn to see the "big picture".				
Garalis (2003)	New organizational culture, responsibility for the creation and development of which lies on the manager.				
Othman, Leman (2005)	Organization adopts and maintains such a form of learning that enables its members to learn in such a way that leads to positively valuable outcomes such as innovations and effectiveness.				

Main characteristics of learning organization as learning environment

Source: table prepared by authors of the paper with reference to Skuncikiene (2008).

Different authors based on findings of their studies define learning organization by emphasizing different yet interrelated aspects, including the following:

- Learning is adaptation to changing environment.
- Levels of learning within organization: individual
 → group → organization.
- Exploration of the experience gained.

- Encouragement of continuous learning, development of learning skills and processes of improvement.
- Knowledge creation.
- Knowledge and information sharing within the organization.
- Pace of learning.
- Learning critical value of organizational culture.

Learning is one of the main processes in a learning organization, and it can influence organizational behaviour, culture and efficiency. It has been established that different authors distinguish the aspect of learning when describing learning organizations since it is emphasized in almost all the definitions of a learning organization found.

Scientific literature analysis that examined the very idea of a learning organization reveals difference of opinions when it comes to the question of *who/what is learning in the organization* – individuals or organization itself, however different authors unanimously agree that knowledge is being created, skills and specific capabilities are formed, and experience is gained by working towards corporate goals of the organization. According to Dixon (1993), Flood (1993), the following three levels of learning can be distinguished: learning individual, learning group, and learning organization (see Fig. 1).



Figure 1. Levels of learning *Source:* prepared by authors of the paper.

According to Simonaitiene (2003), a learning individual learns by individually reading occupational literature, performing experiments, participating in seminars or by receiving information or reflection from his/her colleagues. A learning group learns when two or more individuals working together learn from the same practice or experience. Every group combines employees of different qualifications and experience level and is deliberately made for the implementation and achievement of organizational goals. Senge (1990) suggests that learning in a group creates new interpersonal relationships, develops collective responsibility, stimulates effective management of information, learning from each other, ability to manage stress and conflicts, continuous exploration of environment, and all of it is important for the organization as a system as it involves acquisition, usage, creation and spread of new knowledge and development of skills. Individual and group learning is integrated in the learning organization, i.e., learning takes place at all levels at the same time (Senge, 1990). Some think that if organization is not a learning one, learning system encompassing all the levels is absent in the organization; individual learning is not maintained, and sometimes it is ignored by other members of the organization.

However modern ever-changing environment encourages everybody to learn because learning pro-

vides new possibilities to adapt to changing environment. It becomes difficult to distinguish where learning ends and where work starts, where work ends and where learning starts. Extremely important role is played by the group-work as individuals communicate and interact during discussions. Learning and reflection creates new quality of interpersonal relationships in the group, develops responsibility of the organization as the team and encourages undertaking obligations.

Learning enables to convert data into information, information into knowledge, and allows using them in subsequent process of knowledge accumulation and updating. Knowledge acquisition is inseparable from information search, accumulation and storage, information processing and technology spread (Andziuliene, Brauklyte, 2004).

Comparative analysis of scientific literature sources gives evidence to suggest that foreign and Lithuanian scientists studying learning organizations report different yet interrelated characteristics of learning organizations and on the basis of those characteristics different theoretical models of learning organizations are built (see Table 3). Some authors state that it is possible to promote idea of building a learning organization by manipulating with distinguished elements.

Author	Model characteristics					
Pedler, Burgoyne,	Strategy creation as a learning process; participation in policy formation; availability of information;					
Boydell (1991)	arrangement of reporting and control systems in order to facilitate learning; cooperati					
	among internal structures; flexible reward system; flexible organizational structures; gathering,					
	systematization and spread of information about external environment; inter-organizational					
	operation; favourable learning climate, and equal learning conditions for everybody.					
Senge (1990)	Mental models, creating a shared vision, pursuance of personal excellence, systematic thinking,					
	and learning within the team.					
Watkins, Marsick	Continuous learning, business communication, cooperation and team-learning, shared vision,					
(1992, 1993)	positive learning climate and links with external environment.					
Goh (2003)	Clear vision and mission, obligations and empowerments of leadership, flexible reward system,					
	effective transfer of knowledge and information, group-work and problem solving in groups.					
Garvin (1993)	Problem solving, experimentation, learning from experience and history, learning from experience					
	of others, and skills sharing in the organization.					

Pedler, Burgoyne, Boydell (1991) have identified 11 characteristics of a learning organization. Scientific literature suggests that due to completeness of characteristics list it is one of the most popular models of a learning organization used for research (Balvociute, 2007; Juceviciene, 2007). Juceviciene (2007) using the model proposed by Pedler, Burgoyne, Boydell (1991) has designed a questionnaire, and performed several comprehensive case studies in Lithuania. Researches showed that flexibility of reward system is the most often missing characteristic, an also revealed poor employee involvement in formation of organizational culture, besides not all the employees are provided with learning opportunities. Balvociute (2007) suggests that theory building in this model has reached the synergy effect and does not contradict to five characteristics of a learning organization identified by Senge (1990). According to Senge (1990), the following comprises the essence of a learning organization: mental models (learning person), establishment of a shared vision (learning team), pursuance for personal excellence (learning person), systematic thinking (learning organization), and learning in a team (learning team). Every component is said to be of critical importance, and if at least one of them is missing, model will not function efficiently. A learning organization is understood as a type of flexible and innovative organization where learning plays a major role.

Some similarities can be found with a characterization of the learning organization model proposed by Watkins, Marsick (1992, 1993). According to these authors, such an organization provides opportunities for continuous learning, encourages business communication, cooperation and team-learning, promotes establishment of shared vision, develops positive climate for learning, and links organization with its external environment.

According to Ghosh (2004), organizations do not have "brains" however they possess a cognitive system and have history and memory. Like individuals develop their personality, organizations develop their ideologies and attitudes. However process of organizational learning does not develop itself. Goh (2003) suggests that in the course of this process, organization manager must create favourable conditions for learning and its management in order for it to proceed according to the plan, and identifies the following five characteristics that provide basis for a learning organization: clear vision and mission, obligations and empowerments of leadership, flexible reward system, effective transfer of knowledge and information, group-work and problem solving in groups.

Building a model of learning organization Garvin (1993) emphasized features such as problem solving, experimentation, learning from experience and practices of others, skills and knowledge sharing in the organization. New practice, new knowledge often allows organizations to make many beneficial changes in their activities.

Analysis of different models and characteristics of learning organizations proposed by different authors supports opinion that the most comprehensive, complete and presenting highest number of the characteristics is the learning organization model proposed by Pedler, Burgoyne, Boydell (1991).

In summary, the rationale behind emergence of learning organization concept is search for new ways of successful response to changes of volatile environment. Although many similar characteristics and models of learning organizations are distinguished and identified, only few attempts to design specific means for measurement of organizational learning context exist, and neither clear criteria for evaluation nor optimal level (achievement of which in the organization could mean it can be considered a learning organization) is established (Balvociute, 2007).

According to Senge (1990), building a learning organization is a difficult task that requires long-lasting efforts and involves changes in employee thinking and change of organizational culture leading to better flexibility and rapid adaptation to changing environment, and a learning organization as such is defined as a vision of works planned for the future but not "a type of organization". Every person learns at every level of the organization while bringing changes of himself/herself and of the organization.

Following comparative analysis of different concepts and models of a learning organization from the theoretical viewpoint, it was established that learning in a learning organization is one of the critical values possibly determining performance of the organization.

General characterization of the research

To determine characteristics of a learning organization as learning environment in relation to the concept of learning organization, the empirical research was carried out during a period of September, 2007 – March, 2008.

The tool used for the research was an anonymous questionnaire, comprised of several blocks of questions regarding environment of learning organization: (1) block of questions regarding individual learning level, (2) block of questions for the research into characteristics of learning environment, (3) demographic and professional data block (gender, age, profession, position held).

For the purpose of this research, a learning organization was identified as the environment where employee learning is maintained and encouraged; therefore the aim was to establish what characteristics identified through theoretical analysis were predominant in respondent organizations. The following characteristics of learning organizations can be distinguished:

- Teamwork and team-learning takes place.
- Employees are informed about corporate strategy and shared aims.
- Vision for the future of the organization is considered and discussed.
- Free information flow between different levels of the organization (vertical) and information sharing among employees (horizontal) exists.
- Learning opportunities are made available for everyone.
- Employees are loyal to the organization they work for.
- Employee learning evaluation system is in place.

- Continuous improvement at work exists.
- Employees link and match their plans to plans and strategy of the organization.
- Employees are informally given an opportunity to participate in formation and management of corporate strategy.
- Employees are given material incentives to improve.
- A flexible reward system is in place.
- Collective learning culture is maintained.
- Discussions take place.
- Gained experience is shared and analyzed.
- Employees are honest, straightforward and trust each other.
- Employees respect each other and are tolerant.
- Employees feel responsible for each other and for the organization.

The respondents were asked to indicate the characteristics of a learning organization as learning environment that exist in their organizations.

Most of the questions included in the questionnaire were of the closed or semi-closed types. Opinions expressed by the respondents were assessed using Likert scale where they had to assess presented statements in respective graded levels (with options *always*, *often*, *sometimes*, *never*, and *don't know*). Demographic data of respondents was gathered using nominal interval scales.

Research involved 237 respondents working at organizations of various sizes and types; geography of the research covered counties of Klaipeda, Kaunas, Vilnius, and Siauliai.

Analysis of respondents' demographic data showed the following distribution by gender: 76 men (32 percent) and 161 woman (68 percent) were interviewed. Distribution of respondents by age was the following: 18–25 year old (22.5 percent), 26–35 year old (23.7 percent), 36–45 year old (21.6 percent), 46– 55 year old (22.9 percent), and 56 and more year old (9.3 percent).

Major part of respondents (65.8 percent) had university education, 15.3 percent of which had Bachelor Degree, 82 percent – Master Degree and 2.7 percent – Doctor Degree. All the respondents representing different professions were grouped according to the Lithuanian Professional Classifier as follows: Auditors (36 percent), Health Care (8.7 percent), Education (3 percent), Business (30 percent), Law (4.6 percent), Engineering (13.5 percent), and other professionals (4.2 percent). Given the positions held by respondents, two large groups were distinguished: white-collar workers (48.5 percent) and managers (26.8 percent). Specialists accounted for 13.4 percent of total number of respondents.

More than half of the interviewed subjects

worked in the public sector (64.5 percent) and only 29.4 percent worked in the private sector.

Summarizing demographic data of respondents, conclusion was drawn that most of the respondents were white-collar workers with university education working in the public sector.

Findings of exploring characteristics of a learning organization as learning environment

To reveal typical characteristics of a learning organization as learning environment respondents were given an open-ended question "How do you understand the concept of *Learning Organization*?" Answers were grouped by the identified aspects of learning organization concept using the method of categorization of qualitative information. This is how we found that for most of the respondents the concept of learning organization was associated with the following characteristics of learning environment: encouragement of continuous learning, processes of skills development and improvement. There was also a part of respondents who pointed out that learning is important in a learning organization as a means of adaptation to changing environment. Only few respondents indicated that learning is the key value in the organizational culture. Organizational culture can be assumed to be a complex element encompassing main values, beliefs and standards of the organization, acceptable for all the employees, and the essence of which is best captured by top managers of the organization. Top managers accounted only for 4.8 percent of total number of respondents, thus aspect of organizational learning culture might have been underestimated. It is worth noting that none of the respondents related the concept of learning organization to knowledge and information spread in the organization.

One of the tasks set for this research was to determine what the main motives for respondents to learn are, and what reasons behind employee learning are: is learning associated with personal needs or with requirements for organizational improvement?



Figure 2. Respondents' attitudes towards learning

Data analysis revealed that most of the respondents associated learning with organizational improvement (67.4 percent), as well as with achievement and realization of organizational goals (17.2 percent), and only 13.3 percent of respondents reported that they were learning to raise their qualifications and to be able to earn higher salaries (see Fig. 2). Consequently, such a distribution of respondents' answers shows that learning is understood as inseparable factor of development of the organization and is directly related to the concept of a learning organization, where learning is maintained and encouraged at the individual, group and organizational levels. Supposedly, organization in pursuance of its development goals creates favourable conditions

for employee learning, i.e., by providing appropriate material and other conditions for the maintenance of learning process.

Analysis of a learning organization as learning environment was performed using the factor analysis method (*VARIMAX* rotation of the factor axis), that revealed the following four statistically grounded organizational learning factors: *organizational maintenance of learning environment; cooperation and knowledge sharing; high communication culture; material incentives for improvement*. The first factor had 18.59 percent of total dispersion, the second – 18.19 percent, the third – 13.89 percent, and the fourth 10.45 percent.

	Learning environment	Cooperation, and information and knowledge sharing	High communication culture	Material incentives for improvement
Organizational maintenance of learning environment	1	0.641**	0.596**	0.447**
Cooperation, and information and knowledge sharing	0.641**	1	0.562**	0.471**
High communication culture	0.596**	0.562**	1	0.362**
Material incentives for improvement	0.447**	0.471**	0.362**	1

Interrelations among factors of a learning organization as learning environment (Pearson's correlation coefficient)

** - p < 0.01

Table 4 shows that the most interrelated factors of a learning organization as learning environment are *organizational maintenance of learning environment* and *cooperation and knowledge sharing* (0.641). It is correct to say that favorable learning conditions available for everybody in the organization (continuous improvement, employee learning evaluation system is in place and corporate learning culture is maintained) induce cooperation, as well as knowledge and experience sharing, competencies development that are necessary for operation of the organization and achievement of organizational goals.

The second strongest correlation was found between *organizational maintenance of learning environment* and *high communication culture* (0.596). It is assumed that if organizational learning culture is maintained in the organization, employee learning evaluation system is in place, and learning is seen as a natural process in the organization, then high communication culture forms which is evidenced by employee mutual respect and tolerance, openness and trust, responsibility to each other and especially to the organization.

The weakest interrelation was found between *material incentives for improvement* and *high communication culture* (0.362). Such findings of the research can be explained by the assumption that culture of intercommunication among employees is hardly affected by the wages system or material incentives of employee improvement. The factor of *material incentives for improvement* weakly correlates with other identified factors of a learning organization as learning environment (see Table 4).

The identified factors of a learning organization as learning environment are used for further analysis with a view to find out the attitude of respondents towards learning environment in different groups by gender, age, level of education, sector and position held.

Comparison of the factors of a learning organization as learning environment among different groups of respondents distributed by gender showed that men and women have similar attitudes and assessments. Research revealed that evaluation of learning environment in the organization depends on the age of employees (ANOVA, p < 0.05). In the age group of 18–25 years, half of all the interviewed subjects (50 percent) distinguished the factor of *material incentives for improvement*, and the smallest proportion of respondents in this age group (23.1 percent) reported *organizational maintenance of learning environment*. This choice by age of respondents can be explained by the fact that when starting their career, employees are motivated using flexible system of wages, and learning and improvement is more associated with training offered by educational institutions.

Almost half (47.3 percent) of the respondents in the age group of 26–35 year pointed out that they do not receive material incentives to improve, and more than a half (52.7 percent) of respondents stated that opportunities for everybody to learn are unavailable in their organizations, employee learning evaluation system is not fully developed, and etc.

Evaluation of learning environment was a little bit different for the 36 year old and older respondents. 50 percent of employees of this age reported that factors of *organizational maintenance of learning environment* and *material incentives for improvement* existed in their organizations. Thus, an assumption can be made that employees of over 36 year old are more likely to match their plans for future with organizational ones, and consequently they better understand cooperation and knowledge and experience sharing that takes place in the organization (47.1 percent).

The research revealed that evaluation of learning environment depends on the level of respondents' education (ANOVA, p < 0.05). As much as 65.8 percent of respondents in this research had university education therefore it was important to explore their choices in the evaluation of expression of the learning environment factors. About 40 percent of respondents with university education indicated that *organizational maintenance of learning environment* exists and employees are given *material incentives for* *improvement* in their organizations. 77.8 percent of respondents with post-secondary education indicated that *cooperation, and information and knowledge sharing* takes place in their organizations.

Comparison of choices of employees working in public and in private sector (t-test, p < 0.05) revealed significant differences proving the fact that factors of learning organization as learning environment are more explicitly expressed in organizations of the private sector, with the exception of one factor - organizational maintenance of learning environment (44.3 percent). Employees of the private sector organizations indicated that cooperation, and information and knowledge sharing (41.2 percent) takes place, and high communication culture (38.2 percent) and material incentives for improvement (45.6 percent) are in place in their organizations. An assumption can be made that public sector organizations give less attention to communication, cooperation, knowledge and experience sharing among employees, and system of material incentives for improvement is incomplete. This situation can be explained by the fact that public sector organizations operate under conditions of limited competition and need to compete less than private sector organizations.

Conclusions

1. Comparative analysis of scientific literature suggests that a learning organization is the opposite of a traditional bureaucratic organization, since a learning organization is described as flexible and encouraging personal excellence, open to communication and teamwork; its employees are not afraid to make a mistake as mistakes are tolerated as inseparable part of learning process. Here, hierarchy is replaced by mutual cooperation, and values such as honesty, trust and tolerance prevail. Process of learning must be maintained and encouraged at all three levels: individual, group and organizational, because it is the only way enabling effective creation and spread of knowledge, formation of skills, specific capabilities and experiences in pursuit of shared organizational goals.

It is true that although many similar characteristics and models of learning organizations are distinguished and identified, clear criteria for evaluation are absent and optimal level, achievement of which by the organization could mean it can be considered a learning organization, is not established. A learning organization is considered to be a model of a perfect organization pursued by many organizations in search for ways of successful response to changes in the ever-changing environment.

2. Findings of our research show that when presenting their conceptions of a learning organization, many respondents tend to emphasize that learning is linked to improvement of the organization and to achievement and realization of organizational goals; learning is understood as inseparable factor of organizational development which is directly related to the concept of learning organization where learning is maintained and encouraged at individual, group and organizational levels. A prevailing opinion is that organization working towards its development goals creates favourable conditions for its employee's learning, i.e., ensures material and other conditions for maintenance of learning process and cooperation.

- 3. Analysis and interpretation of the empirical research findings revealed the following four statistically grounded organizational learning factors: organizational maintenance of learning environment; cooperation and knowledge sharing; high communication culture; and material incentives for improvement. The strongest correlation was found between factors of organizational maintenance of learning environment and cooperation and knowledge sharing (0.641), and the second strongest correlation - between organizational maintenance of learning environment and high communication culture (0.596). The weakest interrelation existed between factors of material incentives for improvement and high communication culture (0.362). Consequently, conditions of organizational learning can be considered to be a stronger determinant of environment components such as learning from experience and cooperation than material incentives for improvement.
- 4. Findings of our research lead to conclusion that employees understand that through their daily work routines, conversations and discussion when sharing knowledge and experience they are learning from each other, i.e., that learning and work are inseparable processes.
- 5. It was found that younger respondents are more likely to envisage and value the factor of material incentives for improvement, while older respondents tend to focus on the maintenance of learning environment in the organization.
- 6. In accordance with our research findings an assumption can be made that learning environment of the public sector organizations can be characterized as paying scant attention to employee communication, cooperation, knowledge and experience sharing, and system of material incentives for improvement is incomplete here. This situation can be explained by the fact that public sector organizations operate under conditions of limited competition and need to compete less than private sector organizations

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Besimokančios organizacijos kaip mokymosi aplinkos bruožų tyrimas

Santrauka

Manytina, kad šiuo metu dauguma organizacijų, siekdamos ekonomiškai efektyvios veiklos kintančioje aplinkoje, turėtų vadovautis besimokančios organizacijos idėja, t. y. kurti ir palaikyti bendrą mokymosi kultūrą, skatinti darbuotojų asmeninį meistriškumą, atvirą bendravimą, bendradarbiavimą, skatinti darbuotojus dalytis patirtimi ir veikti nebijant suklysti. Moksliniuose tyrimuose vis daugiau dėmesio skiriama mokymo ir mokymosi proceso analizei, ieškoma efektyvių mokymosi metodų, kuriuos taikant būtų galima patenkinti nustatytus mokymosi poreikius.

Šiame straipsnyje atliekama išsami besimokančios organizacijos sampratos analizė, siekiant atskleisti pagrindinius jos, kaip mokymosi aplinkos, bruožus. Mokymosi aplinka čia traktuojama kaip erdvė, kurioje besimokantysis, sąveikaudamas su informacijos šaltiniais ir kitais individais, konstruktyviai, valingai, sąmoningai tikslingai ir refleksyviai veikdamas įgyja žinių, gebėjimų ir vertybių (Jucevičienė, Tautkevičienė, 2004). Besimokanti organizacija yra analizuojama kaip aplinka, kurioje vyksta darbuotojų mokymasis. Kyla klausimas: kokie besimokančios organizacijos bruožai apibūdina ją kaip mokymosi aplinką ir kokius šios aplinkos veiksnius išskiria organizacijos nariai?

Tyrimo tikslas – atlikti besimokančios organizacijos kaip mokymosi aplinkos sampratos teorinę analizę ir empiriškai atskleisti mokymosi aplinkos, būdingos besimokančiai organizacijai, bruožus. Tyrimo tikslui pasiekti buvo suformuluoti tokie *tyrimo uždaviniai*:

- analizuojant įvairių autorių išskiriamus besimokančios organizacijos bruožus, apibūdinti besimokančią organizaciją kaip mokymosi aplinką;
- empirinio tyrimo pagrindu atlikti organizacijos mokymosi aplinkos bruožų analizę, siejant juos su besimokančios organizacijos konceptu.

Siekiant tyrimo tikslo, buvo atliktas empirinis tyrimas, naudojant anoniminės apklausos anketą, kurią sudarė keletas su besimokančios organizacijos aplinka susijusių klausimų blokų: individualaus mokymosi lygmens tyrimo klausimų blokas, mokymosi aplinkos bruožų tyrimo klausimų blokas, demografinių ir profesinių duomenų blokas (lytis, amžius, profesija, pareigos). Tyrimo metu buvo apklausti 237 respondentai, dirbantys įvairaus dydžio ir tipo organizacijose; tyrimo geografija apėmė Klaipėdos, Kauno, Vilniaus ir Šiaulių apskritis.

Analizuojant ir interpretuojant empirinio tyrimo duomenis, buvo nustatyti keturi statistiškai pagrįsti besimokančios organizacijos kaip mokymosi aplinkos veiksniai: organizacinis mokymosi aplinkos palaikymas; bendradarbiavimas ir pasidalijimas žiniomis; aukšta bendravimo kultūra, materialinis tobulėjimo skatinimas. Nustatyta, kad organizacinės mokymosi sąlygos labiau nei materialinis tobulėjimo skatinimas lemia tokius aplinkos komponentus kaip mokymąsi iš patirties ir bendradarbiavimą.