

Management Change Impact on Organizational Learning in a Business School

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Abstract: Management is one of the key factors of ensuring and developing the organizational learning ability. The paper analyses the impact of changes in management on organizational learning (hereinafter OL) in a business school of a public university. A fundamental change in the management system was carried out in one public university in Estonia, which replaced the academically democratic elections of the rector, deans and directors with a management model that is typical for business organisations, where the heads at all levels are nominated. To identify the impact of changes in management on the organizational learning, Watkins' and Marsick's learning organization questionnaire (DLOQ) has been used in the research. This research differs methodically from the classical application of DLOQ, which measures the absolute value of organizational learning. Therefore the members of business school were asked to evaluate changes in OL using DLOQ in comparison with the period prior to the reform. For that, the respondents were asked to rate the DLOQ characteristics on a scale from -3 to +3, where a negative score means that the characteristic has become worse after the reform and positive scores imply that they are now better. The results show that changes in the management affects the most the part of OL that is measured by DLOQ dimensions "foster inquiry and dialogue" and "promote collaboration and team learning". The reasons pointed out are the loss of confidence in the organization as well as sharpening of competition between the employees. The sample size was not adequate to draw reliable conclusions about the whole organization but was sufficient to analyse tendencies. On this basis it is argued that at least in short-term perspective, replacement of academic democracy with the management model typical of a business organization has rather a negative effect on organizational learning.

Keywords: Organizational learning, learning university, learning business school, university management, management change, Dimensions of Learning Organisation Questionnaire (DLOQ)

1. Introduction

In the growing international competition in the higher education sector, it is extremely important that universities and business schools have competencies that enable them to respond more effectively to changes in their environment. The implementation of organizational changes in business schools requires that business school members obtain new skills and change attitudes and manners. All this happens in the process of organizational learning. Business schools, as well as people, should learn to be able to change as fast as the surrounding environment requires. As such, educational institutions can only respond to external challenges and pressures when they meet the criteria of the learning organization. The constant development and improvement of their organization, which requires learning capacity from the organization, is a precondition for any business school to cope with the challenges they are facing.

Several authors have suggested that in the increasingly sharpening international competition universities and business schools should also be learning organizations (Lorange 1997, Mulford 2000; Willcoxson 2001, Dill 1999; Kristensen 1999; Martin 1999, Patterson 1999, Boyce 2003, Portfelt 2006). Most of them describe either some models or various characteristics of the learning organization at universities: university structure, culture, the role of leaders and teamwork, the role of the university in the society. According to Peter Lorange (1997), organizational learning should be a strategic development component of the business school. Lorange points out that organizational learning can be expected to be a key driver for any leading business school that wants to advance and respond to the customers. Business schools are influential institutions. As such, their governance matters. Good governance requires a stronger faculty commitment to the long-term development of their schools. Good governance needs to give faculty an appropriate role in business schools, one that neither blocks change nor makes faculty members alienated from the management of the school (Canals, 2010).

Learning is one of the management areas in a learning organization. Development into a learning organization depends on the managers, who create an environment to support knowledge sharing, management and creation (Moilanen 2001, Senge 1990). Recently several authors have paid attention to the relationship between organizational learning and university management (Gentle et al., 2017; Gouthro et al., 2018, Friedman et al., 2017; Lauer et al., 2017). Learning is seen as a strategic process, which with capable and purposeful management is aimed at organizational development and constant improvement (Pedler et al 1991). Leaders should ensure the creation of strategies, systems, and methods for achieving performance excellence, stimulating innovation, building knowledge and capabilities, and ensuring organizational sustainability. The values and strategies should help guide all of the organization's activities and decisions (Baldrige 1983).

Changes in the university that was selected for this study provide a worthy and a rare opportunity to study the impact of changes in management on organizational learning. The management of the university changed radically in 2014 when the University Act was passed. The initial model of the university, reflected academic democracy, where leaders at all levels are elected by representative bodies comprising employees of the organization. This was replaced by a management model typical of business organizations. According to the new Act the highest decision-making body of the University is the Board of Governors. The members of the Board of the Governors shall be partially appointed by the Minister of Education and Research (5 members) and partially elected by the University Council (5 members). One member shall be appointed by the Estonian Academy of Sciences. The Board of Governors elects the Rector. Obviously, this means a completely different organizational culture, different relationships between leaders and people they should lead, as well as different attitudes of employees toward the organization's goals. Considering the importance of management from the aspect of organizational learning, our study hypothesised that such a radical change in an organization's management affects the organizational learning. Changes taking place during a short period of time enabled employees to evaluate changes in management based on its impact on organizational learning, as the factors that influence organizational learning were well remembered from the previous system and the impact of changes on these factors was clearly visible and perceptible by employees.

The current study continues the authors' work in the area of organizational learning of business schools (Voolaid and Ehrlich 2012, 2014, 2017) and analyses the impact of changes in the management system on the organizational learning of a business school.

In this paper the authors investigate the radical changes in the management system of the business school under study and the impact of the changes in management on the organisational learning at the business school. Changes in organisational learning are analysed at the selected case using Watkins' and Marsick's Dimensions of the Learning Organisation (hereinafter DLOQ) instrument. This instrument has been used before to measure and compare the organisational learning in higher education institutions (Voolaid, Ehrlich 2010).

The paper is structured as follows: In the first section, a theoretical framework in relation to the role of managers in a learning university and business school are provided. The second section describes the research object and methods used and the third section is dedicated to the main results, discussion and conclusions.

2. Role of management in a learning business school

The role of leaders is most important while developing either the school or university into a learning organization. Organization's leaders should set directions and create a student-focused, learning-oriented climate; clear and visible values; and high expectations. According to White (2005), educational organizations are notoriously slow to change. Truly inspired leadership is needed to work within the norms of consensual governance to support any amount of innovation and adaptation. Leaders must discover how to employ both traditional governance structures and structures more characteristic of learning organizations, e.g. faculty task forces and other consensus building initiatives, to support curriculum innovation and enhance the institution's financial viability and responses to changing external environments (Drugovich et al 2004).

The keys to change in structure, designed to increase organisational learning, are therefore university leaders' capacity and willingness to model collaborative action and inquiry, to involve all staff in the initial setting of directions, to maintain enthusiasm for a broadly shared vision and to cede to staff authority and responsibility

for development and implementation of ideas. The effective leader is therefore less necessarily a charismatic visionary than a collaborating designer (of organisational values, policies, strategies and learning), a steward (who leads by explicitly and visibly serving the interests of the organisational and wider community) and a teacher (who helps others discover their assumptions about the world and develop their full potential) (Senge 1996; Tichy & Cohen 1998). Good leadership, while essential at the top, needs also to be seeded throughout the organisation. Thus, leadership training and team building activities, focusing on enhancing interpersonal communication, conflict resolution and problem-solving skills (Cummings & Worley 1997) must involve people from the highest to the lowest levels of staffing if an institution-wide learning potential is to be created.

Leadership in a learning university is the activity in which all people employed by the university are involved: managerial staff, teaching staff, students as well as those who are not directly involved in teaching. In a learning university, the leader is also a leader in learning, i.e. leads him/herself as well as others, and conditions are created by the top management for the development of the mission, vision, values, policies and strategies. A learning university constantly analyses and updates the university development plan, and university leaders encourage employees and students to take part in setting objectives, implementation of changes and in betterment activities by inviting them to work in work groups and decision-making bodies (Voolaid, Venesaar 2011).

The key of structural changes is in the managers' hands. It is primarily a business school leader's responsibility to ensure that the structures and systems in place maximise the opportunity for organizational learning through encouraging the expression and adoption of diverse ideas, and to ensure that their own actions provide both models and opportunities for organizational learning (Willcoxson 2001).

In the global competition of the business education market business school leaders are responsible for the whole process of organizational learning at business schools. They have to lead the process of organizational changes in the business schools, adopt strategies that allow them to distinguish themselves from their competitors.

Business school leaders have to fill many important tasks and by the management process they need to take into consideration those specific features in order to create a learning organization. In order to survive in the global competition business school leaders need to therefore provide powerful learning environments and build on learning processes that co-focus on academic/scientific methods and practice/applied connections (Sattelberger, 2011).

In a learning business school the leaders should continuously upgrade and improve the teaching and learning processes and create and distribute new knowledge (Willcoxson, 2001). Business school leaders should be increasingly more aware of the need to involve members of the organization in the process of creating a common vision. All employees should participate in formulating the objectives of the business school and they should have a common understanding of the business school's mission and vision (Canals, 2010).

Business school leaders need to build internal and external partnerships to better accomplish overall goals.

Internal partnerships might include cooperation among senior leaders, faculty, and staff. Partnerships with faculty and staff might entail workforce development, cross-training, or new organizational structures, such as high-performance work teams (Baldrige, 1983). Internal partnerships also might involve creating network relationships among your work units to improve flexibility, responsiveness, and knowledge sharing. External partnerships might be with other schools, suppliers, businesses, business associations, and community and social service organizations – all stakeholders and potential contributors. Strategic partnerships or alliances are increasingly important kinds of external partnership (Baldrige, 1983). Dealing with organisational development challenges inside the institution, handling the expectations from the external world while allocating scarce resources and enabling the validity of business school activities requires true leadership (Sattelberger, 2011). According to Sattelberger the role of leaders in their institutions will become more important and more complex. More diversity is a plus at all level in business schools: in the board, in management, faculty and staff, and in the student body; diversity also in a geographical, religious and gender sense (Sattelberger, 2011).

3. Research Design and Methodology

3.1 The Choice and Description of the Selected Case Study

The university under investigation is a public university in Estonia where prior to reform management was based on so-called academic democracy, which is typical of Estonian public universities and is characterised by bottom-up elections of all academic level leaders. In the university under study, the rector was elected prior to reform by a special electoral body comprising students and professors, the faculty deans were elected by the faculty council and heads of departments by the council of the respective department. The so-called academic democracy based management system has its strengths and weaknesses, but it definitely ensures broad-based involvement of academic staff in the university's management at all levels and accountability of the elected leadership to the electorate. Under such a management system, the rector takes into consideration the opinions of professors and students who elected him, in both the university council and management of the university; the dean represents the faculty which elected him in the governing bodies of the university and the department head represents the department which elected him in the faculty council and in other governing bodies. Having been elected, the leaders at all levels should reckon with the interests of the institutions which elected them and represent them effectively in order to be re-elected.

Academic democracy provides individual faculties a relatively high degree of independence in the university. This is especially important for such faculties as the faculty of economics (in essence, an international business school) which are affiliated to and operate independently in international professional organisations and networks and apply for specific accreditations of business schools (e.g. Central and East European Management Development Association, CEEMAN).

A few years ago, a special law was adopted for the university under study and new statutes corresponding to the new law entered into force, which changed the management system radically. The Board of Governors, which so far had been the rector's advisory body, was turned into the highest governing body of the university. Half of the members of the Board of Governors are appointed by the Minister of Education and Research.

According to the new law and statutes, the rector is not elected any more, but appointed by the Board of Governors. Analogously with the rector's office, the faculty deans and department heads are not elected any more either. According to the new statutes, the faculty deans are appointed by the rector and the heads of departments also by the rector, on the proposal of the deans appointed by him. In addition to the disappearance of the function of leadership elections, according to the new financial rules, the role of collective governing bodies (faculty council and department councils) has diminished or quite disappeared in the decision-making over the university finances and over the faculty and department budgets respectively.

The above shows that radical changes have occurred in the management system of the university under study, which provide an opportunity to investigate impact of the changes in management on the organisational learning at the university.

3.2 Research instrument

Changes in organisational learning are analysed at the example of the selected business school, using Watkins' and Marsick's (Watkins and Marsick, 1996) Dimensions of the Learning Organisation (hereinafter DLOQ) instrument. DLOQ is a tool to ascertain employees' opinions about learning at the organization on three levels: individual, team and organizational level. The questionnaire consists of 43 single questions, which are divided into seven dimensions: 1) provide continuous learning opportunities, 2) foster inquiry and dialogue, 3) promote collaboration and team learning, 4) create systems to capture and transform learning, 5) foster movement toward a collective vision, 6) connect the organization to its external environment, and 7) provide strategic leadership for learning (Watkins and Marsick, 1996). Many researchers of the learning organization have later specifically used Watkins and Marsick's questionnaire in their research (Hernandez and Watkins, 2003; Basim et al., 2007; Jamali et al., 2009; Akhtar et al., 2011). The DLOQ is a structured questionnaire that fits well with P. Senge's theory of the learning organization (Senge, 1996) and has been internationally tested.

The DLOQ has also been revised many times and scientifically validated to be reliable (Yang, 2005). The methodology of this research is based on Watkins' and Marsick's DLOQ as the organisational learning measurement instrument. DLOQ is used for the assessment of changes in the organisational learning due to

changes in the management system. A seven-point scale with answer options -3, -2, -1, 0, 1, 2, 3 instead of the 6-point Likert scale, which is typically used in the case of DLOQ, was used. The answer -3 is defined as “has turned much worse”, -2 “has turned worse”, -1 “has turned slightly worse”, 0 “has remained the same”, 1 “has turned slightly better”, 2 “has turned better” and 3 “has turned much better”.

3.3 Methodology

The methodology of the current research is based on a survey. The survey sample has been compiled so that it would contain members of the business school from various positions. The sample was formed so that all university staff groups (management, academic and administrative staff) were represented. The studied institution had a total of 120 employees. The Watkins and Marsick’s questionnaire was distributed to 43 employees. The selection was made on the principle that the respondents were employed long enough to know well both the old and new management system, and secondly, that they worked in the same position under the previous and current management system. This would enable respondents to decide over the changes in the organisational learning without being affected by a different view of the organisation due to a different position. For the same reasons, the respondents who had gained or lost in occupational position with the new management system, were excluded. 28 completed questionnaires were returned, which makes the respondent rate of 65%. Interviews were performed in the spring of 2018.

Interviews were carried out using the DLOQ questionnaire, which was distributed to the employees in the sample. The employees are asked to evaluate changes in all DLOQ characteristics compared to the previous management system on the scale from -3 to + 3. Tables 1-7 provide the numerical values of average differences by characteristics. The results provide information about the impact of management changes on the organisational learning. The limitation of the study is that the survey sample is not sufficient to draw any conclusions about the organisation as a whole.

4. Results and discussion

Data used in the empirical part of this paper, seeking to show the impact of changes in the management system of the HEI under study on organisational learning, are presented in Tables 1-7. The data have been obtained by interviewing a sample of employees using the DLOQ measurement instrument, while changes in the learning level compared to the previous, so-called academic democracy-based management system, where leaders at all levels were elected by representative bodies, rather than the organisational learning was measured. The data in the table implies that after changes in organization occurred, the characteristic turned either better or worse, in the opinion of the survey sample. Negative value means deterioration of the respective characteristic and a positive value implies improvement in comparison with the situation prior to changes in the management system.

4.1 First dimension: Provide continuous learning opportunities

The results of the first dimension are shown in Table 1.

Table 1: Organisational learning rate change in comparison with previous management system. First dimension “Provide continuous learning opportunities”

Individual level	Average change
1. provide continuous learning opportunities	-0.39
1 In my organization, people openly discuss mistakes in order to learn from them	-1.2
2 In my organization, people identify skills they need for future work tasks	-0.2
3 In my organization, people help each other learn	-0.5
4 In my organization, people can get money and other resources to support their learning	-0.8
5 In my organization, people are given time to support learning	0
6 In my organization, people view problems in their work as an opportunity to learn	0.2
7 In my organization, people are rewarded for learning	-0.25

Source: Authors

The average change in characteristics of the first out of three levels of DLOQ, the individual level first dimension "Provide continuous learning opportunities" is -0.39. Out of seven characteristics in this dimension only the 6th characteristic "*In my organization, people view problems in their work as an opportunity to learn*" improved slightly (0.2) after establishing the new management system. This outcome may reflect the staff's reaction to an increasing amount of problems they face in their work in the new situation, where in order to cope with the situation, people try to give a positive meaning to the problems and find ways to learn from them. The first characteristic in this dimension, "*In my organization, people openly discuss mistakes in order to learn from them*", has declined the most and was rated by respondents on average at -1.2 points. The outcome in the case of this characteristic is significant because it characterises indirectly the organization's inner atmosphere. The situation where employees are not discussing mistakes openly may imply both alienation of the employees from the organization in connection with the new management system and the leaders nominated, as well as lack of confidence between employees due to fear and uncertainty, which does not allow discussing mistakes openly with colleagues. The next, by absolute value of change (-0.8), is the fourth characteristic, "*In my organization, people can get money and other resources to support their learning*". The deterioration of the rating of the resources available for learning may not express an objective decline in resources for that but the rating of the situation where after changes in the management system, management of resources has been moved farther away from employees, who themselves dare not ask money for learning.

4.2 Second dimension: Foster inquiry and dialogue

The results of the second dimension are shown in Table 2.

Table 2: Organisational learning rate change in comparison with previous management system. Second dimension "Foster inquiry and dialogue"

Individual level	Average
2. <i>foster inquiry and dialogue</i>	-1.53
8 In my organization, people give open and honest feedback to each other 12 In my organization, people treat each other with respect	-1.8
9 In my organization, people listen to others' views before speaking	-1.6
10 In my organization, people are encouraged to ask "why" regardless of rank	-1.4
11 In my organization, whenever people state their view, they also ask what others think	-2
12 In my organization, people treat each other with respect	-1.2
13 In my organization, people spend time building trust with each other	-1.2

Source: Authors

The second individual level dimension, "*Foster inquiry and dialogue*", received -1.53 points, which was an average for this dimension and is affected the most by management changes among the seven characteristics.

All characteristics in this dimension were rated lower than minus one. Hence, the impact of changes in management on this dimension cannot be accidental and deserves special attention.

The first characteristic in the 2nd dimension (overall 8th) "*In my organization, people give open and honest feedback to each other*", received -1.8 points. This characteristic is somewhat similar to the lowest rated 1st characteristic in the previous dimension. The decline in open and honest feedbacking was caused by changed organization culture due to the new management system. In the conditions where organization's priority is to achieve objectives formulated by the leadership rather than employees' welfare, like it was with leaders elected by the employees, colleagues view each other as rivals and therefore do not give open and honest feedback to each other. Some employees may be desisted from giving open feedback also because of their distrust of colleagues and fear of leaders, who under the new management system are no more dependent on employees.

The next, 9th characteristic "*In my organization, people listen to others' views before speaking*" has also considerably worsened (-1.6). This is somewhat unexpected as listening does not involve communication of information and inflicting (hypothetical) damage to one's individual competitiveness under sharpening competition. Probably, the decreased listening was a reaction to that they do not expect and hope that the

partner would share the thoughts openly and honestly. The negative change in the 10th characteristic, *"In my organization, people are encouraged to ask 'why' regardless of rank"* is -1.4. The setback in this characteristic may be directly due to the new, vertical management system where leaders are appointed and do not depend on the employees and hence have no need to have a dialogue with the employees as before and encourage them to ask "Why". The biggest change (-2) among the characteristics of this dimension was in the 11th characteristic, *"In my organization, whenever people state their view, they also ask what others think"*, implying that people are much less interested in asking opinions from colleagues. This may be due to the above-mentioned alienation from the organization and the feeling that *"my opinion would not change anything"* and therefore, they avoid giving their opinion. Also, they do not expect that colleagues express their opinion sincerely and honestly, which is due to similar reasons as the unwillingness to express one's opinion.

The 12th and 13th characteristic have deteriorated slightly less (-1.2), which is due to building mutual respect and trust in the organization. It is difficult to explain the reasons for declined respect and trust between employees, at least at first view, because notwithstanding the changes in the management and organizational culture, many colleagues were the same when the survey was carried out. Obviously, reasons for the decreased trust between colleagues are similar to the reasons for negative changes in this dimension's characteristics, i.e. sharpening competition between the employees, preferring the focus on organization and achievements to the focus on employees and overall atmosphere in the organization. To summarise the individual level 2nd dimension, it may be argued that the negative change for all characteristics was greater than -1, implying that management and consequently changes in the organizational culture have (at least in the beginning) a noticeable effect on (open) dialogue between people, which in turn has a negative impact on organizational learning at individual level.

4.3 Third dimension: Promote collaboration and team learning

The results of the third dimension are shown in Table 3.

Table 3: Organisational learning rate change in comparison with previous management system. Third dimension "Promote collaboration and team learning"

Team or group level	4.84
3. <i>promote collaboration and team learning</i>	-1.32
14 In my organization, teams/groups have the freedom to adapt their goals as needed	-1.4
15 In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences	-0.8
16 In my organization, teams/groups focus both on the group's task and on how well the group is working	-0.4
17 In my organization, teams/groups revise their thinking as a result of group discussions or information collected	-1.4
18 In my organization, teams/groups are rewarded for their achievements as a team/group	-1.5
19 In my organization, teams/groups are confident that the organization will act on their recommendations	-2.4

Source: Authors

On the next, team or group level, there is only one dimension, "Promote collaboration and team learning", which together with the previous dimension, "foster inquiry and dialogue" is one out of two where the negative change (-1.32) is greater than -1. Although changes in all characteristics in this dimension are negative, the differences in a few characteristics compared to the previous dimension are bigger, between -0.4 and 2.4. The biggest negative change among all characteristics in the questionnaire was experienced by the 19th characteristic *"In my organization, teams/groups are confident that the organization will act on their recommendations"* (-2.4). The rating clearly indicates the lack of confidence that the staff's opinion is taken into consideration in organizational management. Such opinion has not formed of nothing but is based on employees' personal experiences. Namely, the employees could express their opinion about the new regulatory documentation (e.g. statutes) under the new management, but actually these opinions were not taken into consideration in the documents. Moreover, they could not utter their opinion regarding amendments like elected councils of structural units under the old management system. Only some of the

bodies appointed by the new management had some decision-making power. All this strongly shook the employees' confidence that their opinion might be taken into account in the organization's activities.

The next by the size of negative rating (-1.5) is the 18th characteristic *"In my organization, teams/groups are rewarded for their achievements as a team/group"*. This rating is based on the lack of confidence; achievements at the group/team level may be noticed and rewarded. A decision made by the new management that affected all groups was dissolution of the established formalised groups. Obviously, people had not become used to the new system of groups by the time the interviews were carried out, which also caused a negative rating of several other characteristics in this dimension, for example 17th, *"In my organization, teams/groups revise their thinking as a result of group discussions or information collected"* (-1.4) and 14th, *"In my organization, teams/groups have the freedom to adapt their goals as needed"* (-1.4). The latter is also affected by a change in the organizational culture under the new management, where both individuals and groups should be guided in their activity by organization's objectives set by the new management. The negative change (-0.8) was smaller in the 15th characteristic *"In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences"* and 16th characteristic (-0.4) *"In my organization, teams/groups focus both on the group's task and on how well the group is working"*. This implies that solidarity within a group, equal treatment and focus on group tasks have been affected the least by the management change among the characteristics measured in this dimension.

To sum up the 3rd dimension, the lowest rated are changes in these characteristics which measure group relationships to the organization's objectives and possibilities of the group to influence these objectives.

Analogously with the individual level characteristics, this also shows the employees' alienation from the organization's objectives, in the development of which both employees and groups have participated less under the new management than previously. The effect of the new management has been smaller on employees' relationships within groups.

4.4 Fourth dimension: Create systems to capture and transform learning

The results of the fourth dimension are shown in Table 4.

Table 4: Organisational learning rate change in comparison with previous management system. Fourth dimension "Create systems to capture and transform learning"

Organizational level	
4. create systems to capture and transform learning	-0.50
20 My organization uses two-way communication on a regular basis, such as suggestion systems, electronic bulletin boards, or town hall/open meetings	-0.4
21 My organization enables people to get needed information at any time quickly and easily	-1
22 My organization maintains an up-to-date data base of employee skills	0
23 My organization creates systems to measure gaps between current and expected performance	-0.4
24 My organization makes its lessons learned available to all employees	-1.2
25 My organization measures the results of the time and resources spent on training	0

Source: Authors

The most negative rating of changes (-0.50) was given to the 4th dimension "Create systems to capture and transform learning". In this dimension the change in two characteristics is at least -1. These are the 21st characteristic *"My organization enables people to get needed information at any time quickly and easily"* (-1) and 24th characteristic *"My organization makes its lessons learned available to all employees"* (-1.2). Both of these characteristics concern information exchange and making it available. Definitely, such a rating reflects the situation in the organization at the time of the survey; however, it may not be directly caused by changes in the management but the fact that most of the key persons who had information left (or were forced to leave by new leaders) and people no longer knew who to contact for information. Neither did the upgrading and modification of IT systems with plenty of errors contribute to increasing the accessibility of information.

Still, it may be assumed that problems related to the availability of information are temporary and are solved when the new management becomes firmly rooted. Another thing is the availability of so-called strategic information (principles of budget allocation etc.), which probably can be used by a limited number of people under the new management.

4.5 Fifth dimension: Foster movement towards a collective vision

The results of the fifth dimension are shown in Table 5.

Table 5: Organisational learning rate change in comparison with previous management system. Fifth dimension "Foster movement toward a collective vision"

Organizational level	
<i>5. foster movement toward a collective vision</i>	-0.38
26 My organization recognizes people for taking initiative	0
27 My organization gives people choices in their work assignments	-0.2
28 My organization invites people to contribute to the organization's vision	0
29 My organization gives people control over the resources they need to accomplish their work	-2
30 My organization supports employees who take calculated risks	0.4
31 My organization builds alignment of visions across different levels and work groups	-0.5

Source: Authors

A relatively small change (-0.38) has been in the 5th dimension, "Foster movement towards a collective vision". A strong negative rating of the change (-2) was earned by the 29th characteristic of this dimension, "My organization gives people control over the resources they need to accomplish their work". Such a rating is a good reflection of the situation where the decision-making over the resources and their allocation has been moved farther away from the staff and has been made similar to that of a business organization where senior management decides the resources. Moreover, the principles and mechanism of allocation are rather incomprehensible for the employees and they do not sense control over the resources compared to the previous management system. However, it may be argued that greater control over the resources together with centralization for the sake of more effective functioning of the organization was one of the objectives of the management reform. Its negative impact on organizational learning should be considered as an inevitable side effect of the centralization of power and resources.

4.6 Sixth dimension: Connect the organization to its external environment

The results of the sixth dimension are shown in Table 6.

Table 6: Organisational learning rate change in comparison with previous management system. Sixth dimension "Connect the organization to its external environment"

Organizational level	
<i>6. connect the organization to its external environment</i>	+0.05
32 My organization helps employees balance work and family 33 My organization encourages people to think from a global perspective	-0.4
33 My organization encourages people to think from a global perspective	0.6
34 My organization encourages everyone to bring the customers' views into the decision making process	0
35 My organization considers the impact of decisions on employee morale	-0.5
36 My organization works together with the outside community to meet mutual needs	1
37 My organization encourages people to get answers from across the organization when solving problems	-0.4

Source: Authors

The 6th dimension “Connect the organization to its external environment” is the only one where the average change of characteristics is slightly positive (0.05). This result is quite expected because the need to connect the organization to its external environment better than so far was one of the main arguments of the management change. Surprising rather is that the positive change is so small. At the same time, better connection of the organization to its external environment is not something that can be implemented rapidly and the benefits of which members of the organization would immediately recognise. The most positive rating of change in this dimension (1) was earned by the 36th characteristic *“My organization works together with the outside community to meet mutual needs”*. The positive rating shows that the attempts of the reformed organization to co-operate more with the outside community have been successful and are also felt by employees. From this aspect at least, organizational learning has improved due to the new management. The same may be said about the positively changed (0.6) 33rd characteristic *“My organization encourages people to think from a global perspective”*. A more global perspective is a natural side effect of the organization’s greater coherence with its external environment.

A setback in the 6th dimension is registered in the 35th characteristic *“My organization considers the impact of decisions on employee morale”* (-0.5) and 37th characteristic *“My organization encourages people to get answers from across the organization when solving problems”* (-0.4). A slight negative change again indicates weakening of the connection between the employees and management (which is one expression of alienation) and the decisions taken by the management; their effect on employees’ morale has not been sufficiently taken into consideration. The slightly negative change in the 37th characteristic is due to the accessibility of information and interacting within the organization. A slight negative change (-0.4) has been detected also in the 33rd characteristic *“My organization helps employees balance work and family”*, which may be due to the sharpening competition in the organization and increased control over the fulfilment of organization’s objectives, which makes the employees work also outside the working hours.

4.7 Seventh dimension: Provide strategic leadership for learning

The results of the seventh dimension are shown in Table 7.

Table 7: Organisational learning rate change in comparison with previous management system. Seventh dimension “Provide strategic leadership for learning”

Organizational level	
<i>7. provide strategic leadership for learning</i>	-0.17
38 In my organization, leaders generally support requests for learning opportunities and training	0.4
39 In my organization, leaders share up to date information with employees about competitors, industry trends, and organizational directions	0.2
40 In my organization, leaders empower others to help carry out the organization's vision	-2
41 In my organization, leaders mentor and coach those they lead	0.4
42 In my organization, leaders continually look for opportunities to learn	0.4
43 In my organization, leaders ensure that the organization's actions are consistent with its values	-0.4

Source: Authors

In the last, 7th dimension of the questionnaire, “Provide strategic leadership for learning”, the average change in characteristics is slightly negative (-0.17), while in many as four characteristics it has been rated positive.

The change measured in this dimension is especially important for learning, as strategic leadership should have been changed the most under the new management executed by the appointed leaders. A slightly positive overall change in this dimension, which is important in the management change context, is strongly backfired by the 40th characteristic *“In my organization, leaders empower others to help carry out the organization's vision”*, the negative change rating of which is -2 points. Such a negative change rating of downward

delegation of rights testifies to that the leaders appointed based on the new management system do not trust members of the organization who have not elected them. The decline in downward delegation of tasks to carry out the organization's vision probably is a side effect of the centralization of management and resources, where strategically less important tasks that are not directly connected with the implementation of the vision are more likely to be delegated downwards. Slightly negative (-0.4) in the 7th dimension was also the rating of the change in the last, 43rd characteristic *"In my organization, leaders ensure that the organization's actions are consistent with its values"*. The rating again implies distrust of members of the organization against leaders not elected by them and throws doubt upon the ability of the leaders to abide by the values of the organization.

The characteristics with a slightly positive rating (0.2-0.4) are 38, 39, 41 and 42. Significant are the positive change ratings in the 38th characteristic *"In my organization, leaders generally support requests for learning opportunities and training"* (0.4) and 42nd characteristic *"In my organization, leaders continually look for opportunities to learn"* (0.4), implying that new leaders comprehend the importance of organizational learning, as well as, in a narrow sense, of their own learning. Along with a positive change (0.4) in the 41st characteristic *"In my organization, leaders mentor and coach those they lead"*, it gives hope that when employees get used to the new management, communication of information improves and lack of trust toward the appointed leaders decreases, the other aspects of organizational learning also have a potential to improve. However, it is hard to imagine that employees would perceive the organization as their own under the vertical management that is typical of a business organization, as it was the case with the bottom-up election of leaders and with structural units having the decision-making power and relatively independent control over the resources, which was typical of the previous management system and organizational culture.

5. Conclusions

Major changes in the organization's management system are rarely anticipated and therefore their impact on organizational learning has not been studied so far. The radical change in the management system of the organization under investigation provided a good opportunity to study this. After changes in the management system of the institution under investigation, the authors hypothesized that changes have an impact on organizational learning. To test the hypothesis, a study was conducted to measure changes in organizational learning. The Dimensions of the Learning Organisation Questionnaire by Watkins and Marsick (DLOQ) was used as a measuring instrument. The DLOQ questionnaire can measure not only the absolute value of organisational learning, but can also be used to measure relative changes. In practice, the cases where an organization's management system changes radically are rare, therefore, it is not possible to detect the impact of changes in the management system on organizational learning to similar cases occurring elsewhere.

However, the study conducted suggests that changes in the management system have at least some effect on organizational learning, confirming the authors' research hypothesis.

To sum up, the impact of the new management system, the main elements of which are appointed leaders instead of bottom-up election of the leaders and centralisation of the decision-making power and resources, on organizational learning has been rated rather negatively by the interview sample. Out of seven dimensions of DLOQ, 6 dimensions worsened and only one, 6th dimension „Connect the organization to its environment“ improved with the change in management. A distinct change in organizational learning greater than one point due to the change in management occurred in the 2nd dimension „Foster inquiry and dialogue“ (-1.53) and in the 3rd dimension „Promote collaboration and team learning“ (-1.32). The fact that all aspects of the organizational learning dimension „inquiry and dialogue“ have deteriorated considerably implies that the changes in the management have affected not only the relationships between the employees and the leaders but also the relationships between the employees themselves, their confidentiality and openness. The negative impact of the new management is the biggest on dialogue between the staff and leadership, how members of the organization identify themselves with the organization's objectives, exchange of information between leadership and employees and overall atmosphere of distrust toward the leaders about whom it can be said (in the context of the entity under study) that none of them would have been elected under the previous management system. Neither do the employees feel that they can control their resources, which is an inevitable side effect of centralisation. Another problem from the organizational learning perspective is shifting of the administrative power farther away from employees together with the diminishing decision-making power from below and increasing control from above.

Although the use of DLOQ to measure organizational learning changes is considered by the authors to be appropriate, in practice such changes are very rare. Only time can tell what are the effects on organizational learning caused by adaptation difficulties and which are permanent. In the future, as the new management system is better rooted in the institution under study, the authors intend to repeat the study in the same institution and compare the results with this study. The results of the work allow for the organizational management system changes to pay special attention to aspects of organizational learning that are most affected by changes in the management. This will prevent the loss of organizational learning in case of changes in the management system. Although the results are based on a survey of an educational institution, we argue that the results can be used by organizations in other fields.

References

- Akhtar, S., Arif, A., Rubi, E. and Naveed, S., 2011. Impact of organizational learning on organizational performance: study of higher education institutes. *International Journal of Academic Research*, Vol. 3 No. 5, II Part, pp. 327–331.
- Baldrige, J.V., 1983. Organizational Characteristics of Colleges and Universities. *Dynamics of Organizational Change in Education*, McCutchan Publishing Corporation Berkeley, California.
- Basim, H.N., Sesen, H. and Korkmazurek, H., 2007. A Turkish translation, validity and reliability study of the dimensions of the learning organization questionnaire. *World Applied Sciences Journal*, No. 2, pp. 368–374.
- Boyce, M.E., 2003. Organizational Learning is Essential to Achieving and Sustaining Change in Higher Education, *Innovative Higher Education*, Vol. 28, No. 2, pp. 119–136.
- Canals, J., 2010. Can they fix it?. *Global Focus*, Vol. 4 No. 1, pp. 14–18.
- Cummings, T & Worley, C., 1997. *Organization Development and Change*, South-Western College Publishing, Cincinnati.
- Dill, D., 1999. Academic Accountability and University Adaptation: The Architecture of an Academic Learning Organization. *Higher Education*, No. 38, pp. 127–154.
- Drugovich, M.L., Saatcioglu A. and Bilimoria, D., 2004. Institutionalism and Transformational Leadership: Exploring Linkages between the Two Perspectives, Paper presented at the Academy of Management meeting.
- Friedman, H., Kass-Shraibman, F., 2017. What it takes to be a superior college president: Transform your institution into a learning organization. *The Learning Organization*, Vol. 24 Issue: 5, pp. 286–297.
- Gentle, P., Clifton, L., 2017. How does leadership development help universities become learning organisations?. *The Learning Organization*, Vol. 24 Issue: 5, pp. 278–285.
- Gouthro, P., Taber N., Brazil, A., 2018. Universities as inclusive learning organizations for women?: Considering the role of women in faculty and leadership roles in academe. *The Learning Organization*, Vol. 25 Issue: 1, pp. 29–39.
- Hernandez, M. and Watkins, K.E., 2003. Translation, validation and adaptation of the Spanish version of the modified Dimensions of the Learning Organization Questionnaire. *Human Resource Development International*, No. 6, pp. 187–196.
- Jamali, D., Sidani, Y. and Zouein, C., 2009. The learning organization: Tracking progress in a developing country: A comparative analysis using the DLOQ”, *The Learning Organization*, Vol. 16, pp. 103–121.
- Kristensen, B., 1999. The Entrepreneurial University as a Learning University. *Higher Education in Europe*, Vol. XXIV, No. 1, pp. 35–46.
- Lauer, S., Wilkesmann, U., 2017. The governance of organizational learning: Empirical evidence from best-practice universities in Germany. *The Learning Organization*, Vol. 24 Issue: 5, pp. 266–277.
- Lorange, P., 1997. A Business School as a Learning Organisation. *The Learning Organisation*, Vol. 3, No. 5.
- Martin, E., 1999. *Changing Academic Work. Developing the Learning University*. SHRE & Open University Press, Buckingham.
- Moilanen, R., 2001. Diagnostic Tools for Learning Organizations. *The Learning Organization*, Vol. 8, No. 1, pp. 6–20.
- Mulford, B., 2000. Organizational Learning and Educational Change. In: Hargreaves, A.A., Lieberman, M., Fullan, M. & Hopkins, D. (Eds.), *International Handbook of Educational Change*, 5(1). London: Kluwer International Handbooks of Education.
- Patterson, G., 1999. The learning university. *The Learning Organization*, Vol. 6 No. 1, pp. 9–17.
- Pedler, M., Burgoyne, J. and Boydell, T., 1991. *The Learning Company, a Strategy for Sustainable Development*, McGraw-Hill, London.
- Sattelberger, T., 2011. Business education 2025: what’s in store. *Global Focus*, Vol. 5 No. 3, pp. 10–14.
- Senge, P., 1990. *The Fifth Discipline. The Art and Practice of the Learning Organization*. London: Random House.
- Senge, P., 1996. Leading learning organisation. *Training & Development*, Vol. 50, No. 12, pp. 36–37.
- Strandli Portfelt, I., 2006. The University; A Learning Organization?. *An Illuminative Review Based on System Theory*. Karlstad University Studies No. 23.
- Tichy, N. & Cohen, E., 1998. The teaching organization. *Training & Development*, Vol. 52, No. 7. Available: EBSCOhost: AN853671.
- Voolaid, K and Ehrlich, Ü., 2010. Universities' Organizational Learning Rate Dependence on the Level of Participation in the Higher Education Market: The Case Study of Estonia. *Proceedings of the 7th International Conference on Intellectual Capital, Knowledge Management & Organisational Learning*, The Hong Kong Polytechnic University, Hong Kong, China, Academic Publishing Limited, pp 480–488.

- Voolaid, K. and Venesaar, U., 2011. A Validation Study of the Dimensions of the Learning Organization Questionnaire in the Business School Context. G. Prause, U. Venesaar (Ed.). University Business Cooperation Tallinn 2011 (64–83). Berlin: Berliner Wissenschafts-Verlag.
- Voolaid, K.; Ehrlich, Ü. (2012). How Business Schools as Learning Organizations Meet new Challenges: a Worldwide Study. In: F. Chaparro (Ed.). Proceedings of the 9th International Conference on Intellectual Capital, Knowledge Management & Organisational Learning (286–294).. Bogota, Colombia: Academic Publishing International.
- Voolaid, K.; Ehrlich, Ü. (2014). Management as a Tool for Organizational Learning Improvement: A Case Study of Business Schools. *Proceedings of the 11th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning ICICKM 2014: The 11th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning ICICKM 2014, Sydney, Australia, 6-7 November 2014*. 410–417.
- Voolaid, K.; Ehrlich, Ü. (2017). Organizational learning of higher education institutions: the case of Estonia. *The Learning Organization*, 24 (5). [10.1108/TLO-02-2017-0013](https://doi.org/10.1108/TLO-02-2017-0013).
- Watkins, K. and Marsick, V.J., 1996. Dimensions of the Learning Organization Questionnaire, available at: <http://www.partnersforlearning.com/questions2.asp>.
- Willcoxson, L., 2001. Strategies for Changing a University into a 'Learning Organization. Richardson, L. and Lidstone, J. (eds.). *Flexible Learning for a Flexible Society. Proceedings of ASET-HERDSA 2000 Conference*, Toowoomba, Qld, 2–5 July 2000. ASET and HERDSA, pp. 720–731.
- White, J. and Weathersby, R., 2005. Can Universities Become True Learning Organizations. *The Learning Organization*, No. 12, pp. 292–298.
- Yang, B., 2005. Factor analysis methods. In: Swanson, R. A. and Holton E. F. (Eds.), *Research in organizations: Foundations and methods of inquiry*, San Francisco: Berrett-Koehler, pp.181–199.