
**HOW COULD LEADERSHIP CONTRIBUTE TO THE TRANSFORMATION OF
A SCHOOL UNIT INTO A LEARNING ORGANIZATION?**

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ABSTRACT: *This study attempts to explore primary school teachers' perceptions regarding the contribution of leadership to the transformation of schools into learning organizations. The results show that leadership can play a significant key role in the transformation of schools and there is a positive correlation between school leadership practices and its functioning as a learning organization.*

KEYWORDS: learning organization, leadership, schools, quantitative methodology.

INTRODUCTION

The rapid development of information and communication technology has made innovation and change necessary for all organizations, including schools. The future school seems to be heading towards a learning organization. Many Dutch schools have already started operating based on the principles of learning organizations, while simultaneously many theorists argue that there is a strong need for transforming all schools into learning organizations (Argyris and Schön, 1978; Popper and Lipshitz, 2000; Senge, 1990; Smith, 2012).

In addition, the significant contribution of leadership to the development of a learning organization has been widely recognized (Robbins and Judge, 2009). There is strong evidence that supportive leadership is positively associated with organizational learning (Montes et al., 1999; Montes et al., 2005; Swiering and Wierdsma, 1992) and innovation (Montes et al., 2005). Leaders can play an active role in the process of transforming schools, inspiring teachers to develop creativity, adopting new ways of thinking, enhancing group learning (Bass and Avolio, 2006) and facilitating teachers to develop and promote innovative actions (Chanlin et al., 2006). Towards this direction, the Organization for Economic Cooperation and Development (OECD) (2016) stresses the need for schools to be able to learn at a higher rate and teachers to become knowledge workers in order to be able to cope with rising changes and needs.

Despite the fact that the implementation of a learning organization in the field of schools is relatively recent, there are extensive bibliographic reports on this issue. Though, there are not enough empirical studies and researches in the international field which could illustrate today's reality in schools and especially the way organizational learning should be implemented (Fullan, 2000; Silins et al., 2002). Relative surveys in Greece are even fewer (Vassiliadou and Dieronitou, 2014; Georganta, 2009; Kalatzi, 2017; Papadopoulos, 2017; Papazoglou, 2016 and Tagari, 2017).

THEORETICAL UNDERPINNING**Leadership and management**

Recent evolution, progress and changes (especially those since the 1990s) have created a complex, uncertain and demanding environment. Previous types of management and leadership were following a regulatory framework based on the bureaucratic model. Though, in a contemporary context, leaders need to develop new administrative capacities in order to respond to changes at low cost, efficiently and with social sensitivity (Raptis and Vitsilaki, 2007).

School management involves planning, directing, organizing, controlling and deciding on the successful implementation of the school's educational and administrative activities (Brinia, 2008). Headmaster is the hierarchical head of the school and the administrative staff of the school unit and among others he/she helps and directs teachers perform and complete their task, and prepares evaluative reports (Poulis, 2014). Using his / her management skills, he / she is able to handle changes that can negatively or positively affect the learning process, promote communication and collaboration within teachers, achieve the school objectives by developing the appropriate school culture, and also communicate with the wider society in order to respond to its learning and socio-cultural role (Brinia, 2008).

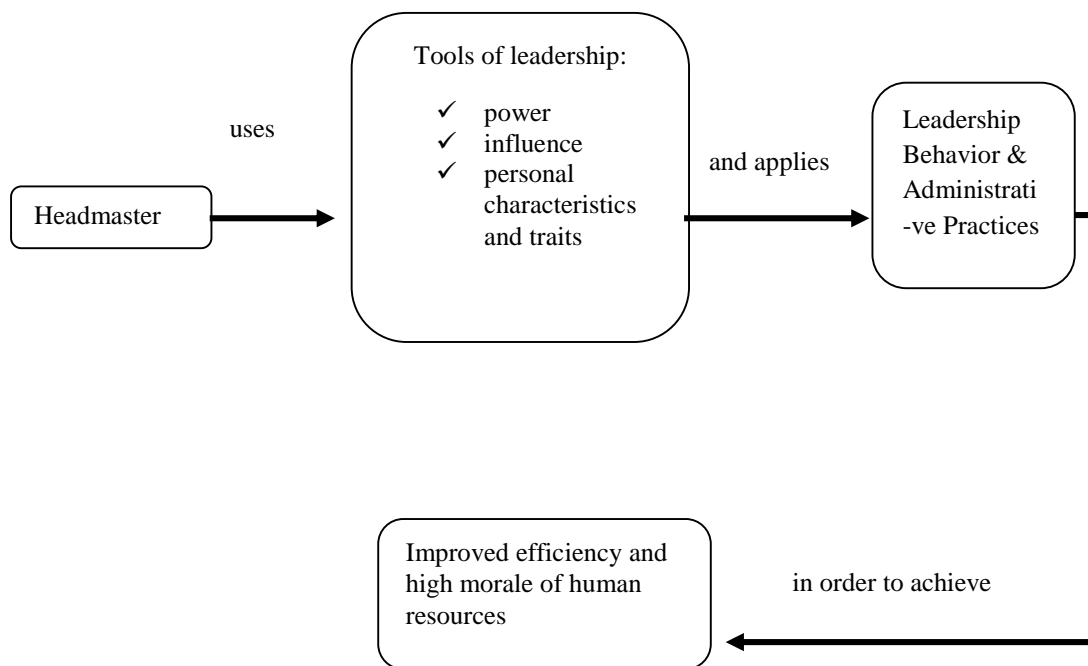


Figure 1. Bonds between management and leadership

Source: Brinia (2008:158)

Transformational leadership

This present study focuses on the transformational leadership, the core function of which is to promote social and organizational change actively. Northouse (2001) describes transformational leadership as the ability to motivate and urge people to change and improve

Published by European Centre for Research Training and Development UK (www.eajournals.org) themselves, while Burns (1978) regards it as a way to meet the needs of workers and to support the achievement of a higher level of performance. It is also related to innovation and the charismatic leader, who has a communicative gift and can communicate his/her vision. Besides, it can inspire, support and encourage teachers' efforts to improve by participating in changes and innovation (Bush and Glover, 2003). Transformational leadership has been found to have also a positive impact on school and organizational learning, since it seeks to engage the members of an organization in order to achieve the goals set, and to improve their skills and abilities (Leithwood and Duke, 1999).

There are several factors contributing to transformational leadership. The leader does not seek to maintain the existing situation, but he/she is willing to take risks, to motivate change and innovation (Bass and Avolio, 1994). This approach is based on the principle that change is vital to an organization and thus plays an integral role in successful leadership. According to Fullan (2002), transformational leadership has a significant impact on teachers' commitment to change and reform in relation to other forms of leadership. The more complex the society is, the more sophisticated and ever-changing the leadership should be (Fullan, 2001).

Transformational leader designs and creates a supportive climate within the organization where individual needs and values are recognized and respected (Bass, 1998). Respect and motivation are important in increasing employee empowerment and creating a sense of recognition of their value and their contribution. The vast majority of teachers feel more committed to their work when managers are able to create learning communities, support and encourage team learning, and stimulate self-confidence and efficiency (Fiore, 2004).

An important function of transformational leadership is the common goals where both the leader and the employees focus on the common good and are committed to the mission and values of the organization (Menon, 2014). Leithwood (1994) considers that the transformational leadership has eight dimensions: Creating a school vision, establishing common school objectives, creating high expectations, awareness of thought, offering personalized support, developing a project in accordance with best practices and organizational values, creating a school culture, developing structures to promote participation in school decision making.

According to Balyer (2012), there are three basic functions of transformational leadership. To begin with, it honestly serves the needs of others, inspires and urges the staff to succeed. In addition, it has the ability to promote a common vision and instill confidence and pride and last but not least it offers spiritual stimulation to the staff, which will make the school acquire the collective power and result in less bureaucracy.

Bass (1985,1998) argues that transformational leadership should have four traits: a) idealized influence, as the leader will be a model and example for the other members of the team, b) intentional encouragement to other members of the group giving meaning to their work and commitment to the common vision and goals, c) spiritual stimulation as he/she seeks new ideas and tries to motivate staff in order to be more creative without criticizing them and d) personalized interest in each member's needs.

School Leadership and Learning Organization

A great deal of research has proved that leadership can contribute to the development of schools as learning organizations. A survey, conducted in Australia by Silins and Mulford (2002) (96 Secondary Schools, 5,000 pupils, 3,700 teachers and headmasters), highlights the strong

Published by European Centre for Research Training and Development UK (www.eajournals.org) relationship between leadership and organizational learning. In addition, Mitchell (1995) regards leadership as the most important influence on learning. School principals are largely responsible for creating the conditions and circumstances under which learning can take place.

Yuen and Cheng (2000) argue that continuous teacher learning is the key to successful school reform and that managers should create an environment which encourages teachers to learn continually both at individual and team level. A similar view is repeated by Glickman et al. (1995) who report that school managers should create conditions conducive to research, lifelong learning and reflection. Similarly, Johnston (1998) emphasizes that school leadership should focus on learning. This means that it has to inspire a vision and a target, provide positive models, disseminate and share knowledge, experiences and skills.

In addition, Newmann (1996), Louis and Kruse (1998) argue that school leadership should act not only as a teacher guide but also as a stimulator that will facilitate learning interactions on issues of change and school improvement. Similarly, Lam et al. (2002) in their research at Primary and Secondary Schools (51 and 37 respectively) in Taiwan, show that transformational leadership can be crucial to the promotion of organizational learning in schools regardless their type or level. In a similar survey (67 Primary Schools, Hong Kong, with a sample of 1,196 teachers), Lam and Pang (2003) concluded that the action of a transformational leadership plays a key role in enhancing organizational learning in schools, while Barnett et al. (2001) argue that transformational leadership is appropriate to promote educational reforms in schools.

METHODOLOGY

Research aim

This paper comes to explore the perceptions of primary school teachers about the role and practices of leadership in transforming the school into a learning organization in combination with teachers' control variables (years of service and employment relationship).

Research sample

The sample of the survey were educators of all primary education specialists who serve the public primary schools in the prefecture of Ilias. The survey was conducted from 20 April to 30 May 2018. The teachers who took part in the survey were of different ages, length of service and employment relationship (permanent-deputies). Overall, questionnaire responses were provided by 227 people. The sample chosen should be as representative as possible on the basis of common features and characteristics of the respondents in order to make any conclusions applicable to the sample population as a whole.

The random sampling method was used. School-based tables were used, according to the records of the Primary Education Directorate of Ilias and numbers were assigned for each school unit. In this way all the school units and teachers had the same chance of being represented (Creswell, 2011). For the purpose of this study, 294 questionnaires were distributed in 31 school units, while 229 were answered back (77.89% response rate). Two (2) questionnaires were not included in the statistical process because they were not sufficiently completed. The total number of teachers serving in schools of Ilias was 833, according to the data collected from the Primary Education Directorate of the Prefecture of Ilias. Therefore, the

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sample of the survey represents 27% of the population of primary school teachers in Ilias ($227/833 = 0.27$).

Data collection method and research tool

Quantitative research was carried out as a method for collecting data. This method makes it possible to measure theoretical concepts, views, concepts by means of closed or open questions (Kyriazi, 2005; Psarrou et al., 2004). The technique used to collect the data was the structured questionnaire which included closed-ended questions to facilitate the participants in the survey (Javeau, 1996).

This study is part of a wider survey conducted using a questionnaire consisting of three parts and 74 questions. Part of it contained the Park LOQS questionnaire (2008) with 35 questions used to explore teachers' perceptions of whether the schools have the characteristics of a learning organization according to the five principles of Senge (1990).

The answers are given by the respondents at the base of a five-level Likert scale ranging from 1 (Almost Never), 2 (Rarely), 3 (Sometimes), 4 (Frequently) to 5 (Almost Always). The five principles concern: Shared Vision, Personal Mastery, Mental Models, Team Learning and Systems Thinking. This questionnaire was used in Greece for the first time as part of this research and confirmatory factor analysis was made (Panagiotopoulos et al., 2018).

Another part of the questionnaire included the questionnaire of Kouzes & Posner (2002). It was created after several Leadership Inventory Practices (LPI) surveys with five areas of leadership: Model the way, Inspire a shared vision, Challenge the process, Enable others to act, Encourage the heart.

This research tool is reliable to measure leadership practices with high percentages of validity (Summer et al., 2006: 45) and it has been used in many surveys. It consists of 30 closed-ended questions which intend to investigate the role of the leader and the leadership practices that contribute to the transformation of the school into a learning organization. Six questions correspond to each of the five leadership practices.

The answers are given by the respondents on the basis of a Likert graduate scale ranging from 1 (Almost Never), 2 (Rarely), 3 (Sometimes), 4 (Frequently), 5 (Very Frequently). A grouping of questions based on each indicator's measurement area on leadership practices was avoided in order to limit the possibility of guiding respondents' thinking (Cohen et al., 1994). This questionnaire has been used twice in Greece and its translation was made by Tagari (2017: 59-60).

The questionnaire was distributed to the participants either in person at schools that were relatively close to the researcher or by mail to remote schools, while each envelope contained a second enclosed envelope with completed shipping data (Creswell, 2011: 207).

Data analysis

After being collected, the questionnaires were checked for completeness and correctness. The creation of a database in the statistical software SPSS v 25.0 (Statistical Package for Social Sciences) followed in order to enter the encoded questionnaire information. Correlations were made with different types of statistical analysis and processing (frequency-gradient tables, mean value, standard deviation, maximum, minimum and multiple linear regression). As far as the reliability of the scale Leadership Practices, the Cronbach's Alpha, the statistical index of

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internal consistency, as a whole was 0.970, which represents very satisfactory quality of the measurement (Table 1).

Model the way	6	0,858
Inspire a shared vision	6	0,892
Challenge the process	6	0,847
Enable others to act	6	0,883
Encourage the heart	6	0,899
Leader's role	30	0,970

Table 1. Leadership practices (Cronbach's Alpha)

Research Results

Statistics

As it can be seen from Table 2, the average of the answers of the sample teachers is about 4 for each principle and totally for the learning organization. Specifically for the Shared Vision, Average was 3.9 and Standard Deviation (SD) = 635, for Team Learning, Average =3.9 and SD =, 667 and Systems Thinking Average = 3.9 and SD=, 620. Following are the Mental Models, Average = 3.7 and SD=, 594 and Personal mastery, Average= 3.7 and SD=, 611. Overall, the learning organization emerged, Average= 3.8 and SD= 545. According to the respondents, the functioning of the school in primary education often presents features of shared vision, mental models, personal mastery, group learning and systems thinking. Therefore, Senge's organizational learning principles have been satisfactorily developed as the Likert response scale was five-level. The more developed learning principles of the learning organization were the shared vision, team learning and systems thinking.

Senge Principles	Total replies (N)	Minimum	Maximum	Average	Standard Deviation SD
Shared Vision (SV)	227	2	5	3,9	,635
Mental Models (MM)	227	2	5	3,7	,594
Personal Mastery (PM)	227	1	5	3,7	,611
Team Learning (TL)	227	1	5	3,9	,667
Systems Thinking (ST)	227	2	5	3,9	,620
Learning Organization (LO)	227	2	5	3,8	,545

Table 2. Aggregate results for Senge's principles

Source: Panagiotopoulos et al.(2018)

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According to Table 3, teachers believe that headmasters can play a very important role in the transformation of school units into a learning organization (average 4.7). The most important of the leadership practices which are considered to be decisive are “Encourage the heart” (average 4,9) and “enable others to act”(average 5.0).

Leadership practices	Total replies (N)	Minimum	Maximum	Average	Standard Deviation (SD)
Model the way	227	3	6	4,8	,779
Inspire a shared vision	227	2	6	4,6	,870
Challenge the process	227	2	6	4,4	,856
Enable others to act	227	3	6	5,0	,831
Encourage the heart	227	2	6	4,9	,922
Leadership practices	227	2	6	4,7	,795

Table 3. Aggregate outcomes for leadership practices

Correlation between leadership practices- control variables- and learning organization

According to Table 4, the multiple regression analysis shows that there is a statistically significant positive correlation between leadership and learning organization (Stand Beta = ,609, $p < ,001$) in all the dimensions. The leader plays a positive role in creating a learning organization. The most influential dimension of the five principles of Senge is the creation of a shared vision (Stand Beta = ,587, $p < ,001$), while the development of personal mastery seems to affect less (Stand Beta = ,491, $p < ,001$).

Regarding the control variables, it seems that the working relationship of deputy teachers with the school unit does not favor the creation of a learning organization (Stand Beta = -,170, $p < ,05$) or the development of mental models (Stand Beta = -,153, $p < ,05$), personal mastery (Stand Beta = -,141, $p < ,05$) and systems thinking (Stand Beta = -,187, $p < ,05$). The fewer years of service in the school unit favor the creation of a shared vision (Stand Beta = ,126, $p < ,05$) and the development of mental models (Stand Beta = ,132, $p < ,05$). The role of the leader in conjunction with the control variables interprets the 38.8% of the fluctuation in the learning organization (Adjusted R² = ,388). For the five dimensions of the learning organization, the rate of interpretation of the variation ranges from 24.7% to 38%.

Independent variables	Leadership		Years of service		Working relationship		Adjusted R ²
	Stand. Beta	Sig	Stand. Beta	Sig	Stand. Beta	Sig	
Learning organization	,609	,000			-,170	,001	,388
Shared Vision (SV)	,587	,000	,126	,018			,380
Mental Models (MM)	,497	,000	,132	,024	-,153	,008	,307
Personal Mastery (PM)	,491	,000			-,141	,016	,250
Systems Thinking (ST)	,527	,000			-,187	,001	,300
Team Learning (TL)	,500	,000					,247

Table 4. Leadership & Learning Organization correlation

Concerning the “model the way” (Table 5) there is a positive correlation with the learning organization (Stand.Beta = ,544, $p < ,001$). The working relationship of deputy teachers in the school unit does not favor the development of the learning organization (Stand.Beta = -,149, $p < ,05$). The impact of the “model the way” by the school principal and the control variables interpret 31.3% of the fluctuation in the learning organization (Adjusted R² = ,313).

Independent variables	Model the way		Years of service		Working relationship		Adjusted R ²
	Stand. Beta	Sig	Stand. Beta	Sig	Stand. Beta	Sig	
Learning organization	,544	,000			-,149	,007	,313

Table 5. Model the way & learning organization correlation

The inspiration of a shared vision (Table 6) is positive and statistically significant with the learning organization (Stand.Beta = ,625, $p < ,001$). The working relationship of deputy teachers does not favor the creation of a learning organization (Stand.Beta = -,190, $p < ,05$). The effect of inspiration of a shared vision and control variables interpret 40.7% of the fluctuation in the learning organization (Adjusted R² = ,407).

Independent variables	Inspiration of shared vision		Years of service		Working relationship		Adjusted R ²
Dependant variables	Stand. Beta	Sig	Stand. Beta	Sig	Stand. Beta	Sig	
Learning organization	,625	,000			-,190	,000	,407

Table 6. Inspiration of shared vision & learning organization correlation

“Challenge the process” by the school leader is positively correlated with the learning organization (Stand.Beta = ,549, $p < ,001$) in all the dimensions (Table 7). The fewer years of service in the school unit favor the learning organization (Stand.Beta = ,112, $p < ,05$). The working relationship of deputy teachers in the school unit does not favor the learning organization (Stand.Beta = -,136, $p < ,05$). The role of the school leader and the control variables interpret 34.5% of the fluctuation in the learning organization (Adjusted R² = ,345).

Independent variables	Challenge the process		Years of service		Working relationship		Adjusted R ²
Dependant variables	Stand. Beta	Sig	Stand. Beta	Sig	Stand. Beta	Sig	
Learning organization	,549	,000	,112	,047	-,136	,015	,345

Table 7. Challenge the process & learning Organization correlation

As shown in Table 8, “enable others to act” correlates positively with the learning organization (Stand.Beta = ,551, $p < ,001$). The working relationship of deputy teachers does not favor the creation of a learning organization (Stand.Beta = -,165, $p < ,05$). The role of the school leader combined with the control variables interpret 32.1% of the fluctuation in the learning organization (Adjusted R² = ,321).

Independent variables	Enable others to act		Years of service		Working relationship		Adjusted R ²
Dependant variables	Stand. Beta	Sig	Stand. Beta	Sig	Stand. Beta	Sig	
Learning organization	,551	,000			-,165	,003	,321

Table 8. Enable others to act and learning organization correlation

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 “Encourage the heart” is positively correlated with the learning organization (Stand.Beta =, 548, $p < .001$) in all the dimensions (Table 9). The working relationship of deputy teachers in the school unit they serve does not favor the creation of a learning organization (Stand.Beta = -, 178, $p < .05$). The role of the school leader in combination with the control variables interpret 31.7% of the fluctuation in the learning organization (Adjusted R² =, 317).

Independent variables	Encourage the heart		Years of service		Working relationship		Adjusted R ²
	Stand. Beta	Sig	Stand. Beta	Sig	Stand. Beta	Sig	
Learning organization	,548	,000			-,178	,001	,317

Table 9. Encourage the heart & learning organization correlation

CONCLUSION

As it can be obviously seen (Table 4) the leader’s role and the leadership practices he/she uses are significantly related to the functioning of the learning organization in its five dimensions (Stand Beta =, 609). The school unit can be transformed into a learning organization on the condition that school leaders implement appropriate practices. The research findings are in accordance with Mitchell’s (1995), Saitis’s (2005), Senge’s (1990) and Watkins and Marsick’s views (1993) who regard leadership as being the most important influence on organizational learning. In addition Lam and Pang (2003), Lam et al. (2002), Tagari (2017) conclude that transformational leadership plays a critical role in enhancing organizational learning.

It is worth mentioning the classification of leadership practices, according to the extent to which each influences the functioning of the school as a learning organization. The most influential is “inspire a shared vision” (Stand Beta =, 625), the second is “enable others to act” (Stand Beta =, 551), the third is “challenge the process” (Stand Beta =, 549), the fourth is “encourage the heart”(Stand Beta =, 548) and the fifth is “model the way” (Stand Beta =, 544). These findings are in accordance with the relevant literature.

Senge (1990, 2013) believes that the shared vision has the power to revitalize the creative forces and capabilities of the individuals of an organization, to encourage experimentation and innovation, and to increase the ability to overcome all the obstacles that arise. Similarly, Glickman (1993) argues that when school staff and students share a vision and they are committed to its implementation, a dynamic is created. A dynamic that can attract other school community people to help achieve the school's goals, while Wallace et al. (1997) point out that the common vision is vital for the transformation of schools into a learning organization.

According to the findings, the shared vision is the dimension mostly affected by the role of the leader and the dimensions of the leadership practices. This finding is supported as well by Morden (1997) who states that a healthy vision will let workers imagine it as a reality, while Kantabutra and Avery (2010) believe that it will inspire workers to think about the future. Dvir et al. (2014) estimate that it enables an organization to realize short and long-term goals and

Published by European Centre for Research Training and Development UK (www.eajournals.org) ambitions, while, according to Lewis et al. (1997) it helps the organization to develop the ability to adapt to internal and external changes. Cristy (2008) and Smith (2007) suggest that workers should be able to express and develop their personal visions and combine them with the organization's common vision. On the contrary, dimensions of the learning organization like personal mastery and mental models are less affected by the role of the leader and leadership practices.

Schildkamp and Visscher (2010) also believe that decentralization of power, collective decision-making and the creation of a shared vision encounter many difficulties arising due to cooperation, participatory decision-making (Servage, 2008) and due to internal contradictions (Achinstein, 2002).

In addition, regarding the control variable, years of service at the school, the answers of the participants show a positive correlation between the fewer years of service and the organizational changes. This finding is also confirmed by Carr (1985) who regards professional experience and age as being two important factors influencing the acceptance of change. Poppleton (2000) reports that younger teachers are more positive to change. Hargreaves (2004) argues that younger educators are usually more enthusiastic about changes. Tagari (2017) finds also a positive correlation between fewer years of teacher education at school and organizational change.

As far as the working relationship of teachers is concerned, it appears that there is a negative correlation between deputy teachers and organizational changes as their temporary presence in the school unit prevents them from feeling psychologically safe to commit themselves to an organizational change. Senge (1990) states that the development of the five principles requires time, persistence and sustained effort. Also, according to the findings of Lee's research (2006), the temporary placement of teachers at school has a negative impact on job satisfaction and school efficiency as a result.

Conclusions and consequences for research and practice

Regarding the contribution of the school leader, the majority of the participants claim that he/she could definitely play a critical role in the development of the learning organization through their action, initiatives and co-operation. As far as leadership practices are concerned, the vast majority of the sample teachers believe that all of the five practices enhance the organizational learning.

The transformation of a school unit into a learning organization could equip it with new organizational structures, culture, values, visions and goals with multi-level participation of all members of the school community as well as stakeholders and institutions of the wider socio-economic reference framework. Interactions and interdependencies with the internal and external environment are many and the whole effort seems to be difficult, demanding and challenging. In such a context the present study seeks to contribute, regardless its methodological limitations, to a further understanding of the school reality and to highlight the potential, necessity and orientation for transforming the school into a learning organization.

Future Research

Research constraints of the methodological approach chosen as well as the small number of relevant surveys conducted in Greece make it necessary to further investigate and compare the role of the school leader in the transformation of school units in learning organizations not only

Published by European Centre for Research Training and Development UK (www.eajournals.org) in the Prefecture of Ilias but also in other regions of Greece, and in other countries. In addition, further research should also focus on both internal and external factors of schools that influence and define organizational learning, such as students, parents, local actors, and formal education policy of the relevant Ministry. In this way one could understand *de profundis* the way schools function, whether and to what extent organizational features are actually identified, what their content is and simultaneously to detect causes and conditions that favor organizational learning or not.

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