

On the Views of Public Schools teachers & Headmasters of Primary & Secondary Education in Greece about TQM: An empirical Study

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Abstract

Total Quality Management (TQM) constitutes a different approach towards the consideration and implementation of management which is applied to the administration of education systems and school units. It contributes substantially to the enhancement of effectiveness through the improvement of the quality of procedures, which aims at the satisfaction of the final recipients' needs and expectations. The course towards quality achievement is a continuous and uninterrupted process which presupposes the essential, active involvement and commitment of everyone who is engaged in the educational procedure. The research which was conducted during the 2012-2013 school year tried to shed light on the extent to which two basic principles of TQM were implemented in school units of primary and secondary education in the Peloponnese district. Afterwards, the first one from the two aforementioned principles is presented. It is the principle which was about the opportunities given to educators for continuous in-service training and further education which contribute to both personal and professional development.

Keywords: Total Quality Management, administration of school units, quality in education, professional development of educators.

JEL classification: M53

Introduction

Quality constitutes a complex concept, which refers to all business and economic dimensions ranging from the designing and production of goods and services to the total function and administration of businesses. A shift in priorities from price competition to quality competition is a compulsory strategic choice which can ensure survival.

Total Quality Management (TQM) constitutes a new approach towards the administration of businesses and institutions. In TQM quality refers not only to the improvement of the provided products and services, but also it refers to all the procedures, activities and functions of the institution aiming at the total fulfilment of needs and demands of the customers. At the same time, the commitment of everyone in the institution to active involvement in the effort for improvement is secured.

Given that quality must be under continuous examination in the light of the current circumstances, the adoption of TQM is translated into a new behaviour pattern and function of the institution with long-term effects on every department, activities and employees. The success of this implementation lies in the creation of the appropriate working environment and the acceptance of the need for improvement.

The philosophy and the principles of TQM can have important applications in school units, which constitute educational institutions. The field of education over the last decades faces various challenges which render the need for adaptation to the data of the modern society indispensable.

The relationship between education, economy and society has been always reciprocal.

Dynamic economies have always gained power from the quality of the citizens' education and their ability to adjust dynamically and directly to the changes which were being brought about (Irgis & Makri, 2009).

Our educational system has been organised in accordance with Taylor's principles. Emphasis has been given mainly to the quantitative dimension rather than the qualitative dimension of education.

Thus it is clear why our educational system is incapable to deal with international changes, to adjust to them and meet the challenges of competitions, through practices of continuous improvement and quality ensurement. The newly formed educational culture does not support such practices. For this reason quality should be an aspect of our educational system. It should also be continuous in the teaching process and it should reflect to culture and the education of our citizen (Irgis & Makri, 2009).

The necessity of the present research has emerged from the acknowledgement that quality is a result of the continuous improvement of processes in every level of the institution. It has also emerged from the general demand for effectiveness and quality of the educational systems and services which is suggested as the decisive instigator of development. Besides, the workforce is considered as the main resource of the European Union (Pedagogical Institute, 2008).

The purpose of the research is the investigation of the extent to which two basic principles of TQM have been implemented in public school units of primary education (Primary Schools) and secondary education (all day Junior High Schools and all day General Unified Lyceum) in the Peloponnese district (regional units of Argolida, Arkadia, Korinthia, Lakonia). The investigated principles referred to the educators' continuous in-service training and further education aiming at their professional development, the overall and systematic involvement in the decision making processes within the school unit or classroom. The data about the professional development of educators will be presented now.

In all school levels educators' training needs, views about the form, the time of implementation and the effectiveness of the in-service training have been investigated by scientific researches both in Greece and abroad. However, no preceding study has been detected in Greece which deals with effects that the school level, personal and service characteristics have on educators'/principals' views about the training opportunities offered and the way they are used.

Therefore, the present empirical study tries to answer the following research questions:

To what extent do educators/principals per school level consider that they are offered opportunities for in-service training and how do they take advantage of them?

To what extent does the school level affect educators'/principals' beliefs about the offered opportunities for in-service training and the way they take advantage of them?

To what extent the educators'/principals' personal (sex, age) and service characteristics (years of previous experience, post of responsibility they fill) who work in different school levels affect their beliefs about the offered opportunities for in-service training and the way they take advantage of them?

In-service training and professional development

The pursuit of quality in goods production and in provision of services can not be achieved without qualitative employees. Consequently, the development of quality practises means the development of human resource that the institute has and the need of an effective system for its management. Human resources have got the most insufficient management in comparison with the rest departments of the institution. Perhaps this happens because they are contradictory, unsteady and unpredictable in contrast with materials and machines. The quality of the machines can be measured relatively easily, but the quality of human resources can not.

James (1998) considers employees' training and development as a demand in businesses which are quality-oriented. Personnel's training is as important as the maintenance of the machines and the upgrading of the systems. When it takes place regularly, it can be the base of continuous amelioration. According to Liarmakopoulos (2003) the human workforce can be a competitive asset for the survival of a business. For this reason personnel's training in new methods and techniques should not be regarded as expense which overcharges the business budget, but as an investment through which employees develop their skills and they are developed.

In-service training is a regular, continuous and repetitive process which belongs to the lifelong learning context and adult education and it ensures appropriate conditions for personal and professional development (Hargreaves, 1994). Regarding the issue of in-service training, European Union highlights the necessity for redefining the role of the educator according to the needs of knowledge and information society, of social coherence and citizens' active participation (Pedagogical Institute, 2008).

In a context like this, educators are urged to reconsider and update the teaching objectives, extend their commitment for more general improvement of school and strengthen their role as vehicle of changes. Apart from research, investigation and reconsideration educators need to critically develop their knowledge, skills and empathy they have in order to make their interaction with their pupils and colleagues easier in every stage of their professional career (Yfanti & Bozaitis, 2007).

Assessment of the official in-service training programmes that have taken place so far reveals that there are insufficiencies, problems and weaknesses. Relevant studies show that the educators' attitude was

positive, but their quality was questionable. Their school-oriented character, centralizing function, problems relevant to trainers and training material, failure to meet the objective and recorded trainees' needs are some of their weaknesses. Moreover, they lacked continuity, consistency, and regularity since they were characterised by lack of coordination, fragmentation and introduction of models from abroad without any effort to adjust them to the greek educational environment and educational functions. Only few in-service training programmes were designed on the basis of adult education principles taking into consideration the trainees during the design, implementation and evaluation of the programmes. Lack of motivation continues to render them unattractive while flexibility and multiformity are absent. Furthermore their format is either a short seminar or a long in-service training programme without any trace of differentiation according to the individuals (Res 2006a, Pedagogical Institute 2008, Dara & Saitis 2010). The role of educators has been limited to the one of the recipient and executor of instructions and commands in the bureaucratic context of an administrative management. The vast majority of the official designed programmes for professional development were organised in a short-term basis and they were implemented in a centralised context which suspended every effort for development, self-actualisation and initiative during the educational work (Yfanti & Vozaitis 2007).

Material and method

The investigation of the topic which is under examination was based on a quantitative research with an anonymous questionnaire which was composed by the researcher after consulting the relevant literature. The questionnaire was the same both for educators and principals. It consisted of two parts. In the first part the participants had to mention their personal (sex, age) and service characteristics (level of education in which they work, years of previous experience, post of responsibility they fill), while the second part contained 15 statements which asked the participants to mention the extent to which they agree or disagree with every statement. To be more specific, the statements referred to the opportunities offered to them for in-service training, the extent to which these opportunities are used, the pursuit of self-training/self-education, the extent to which training needs are met, facilitation and encouragement for participation by the superintendent and the desirable format of the in-service training programme (time of conduct, methodology). As for the investigation of the degree to which educators /principals agree with the statements of the questionnaire a five degree Likert scale has been employed where: "1= I totally disagree" 2= "I partially disagree", 3= "I have no opinion", "4= I partially agree", "5=I totally agree". 2239 questionnaires have been sent in total to 91 urban and semi-urban school units of primary and secondary education in the Peloponnese district out of which 919 have been filled and sent back. The percentage of response was 41 %.

The distribution of sample on the basis of the individual and service characteristics is presented in the following tables:

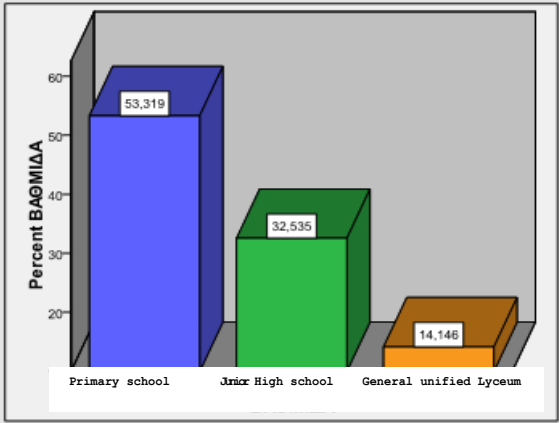


Chart 1: Distribution of sample on the basis of the school type

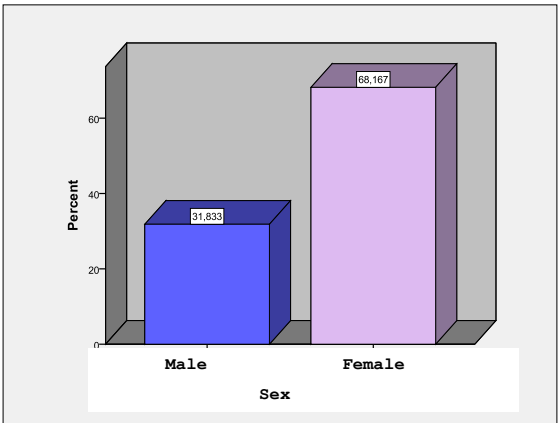


Chart 2: Distribution of sample on the basis of the sex

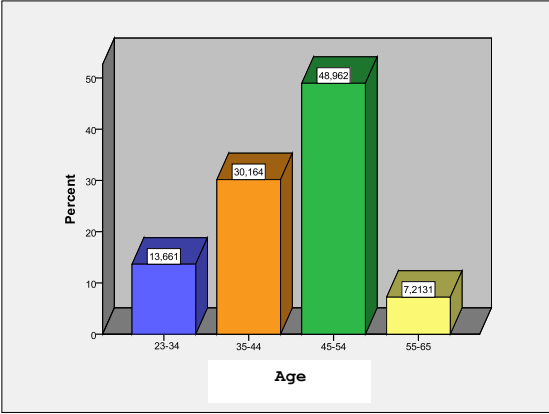


Chart 3: Distribution of sample on the basis of the age group

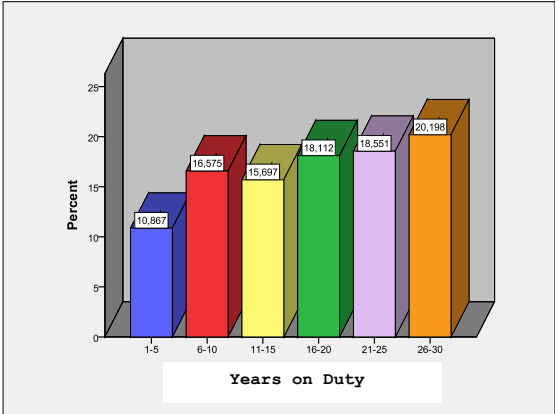


Chart 4: Distribution of sample on the basis of the number of years in service

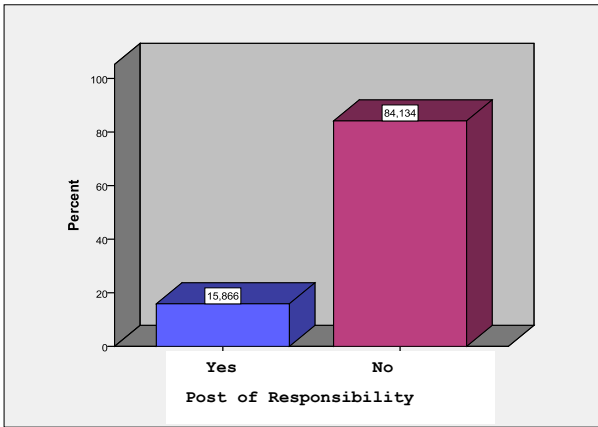


Chart 5: Distribution of sample on the basis of the post of responsibility

In order to ensure that all the participants will comprehend the statements of the questionnaire in the same way, a pilot application of the questionnaire to 10 educators took place before the distribution of the questionnaire to all the participants. Then the feedback provided by them was evaluated and it was used to define the length, the content and the layout of our research tool.

The SPSS 20 (Statistical Package for the Social Sciences) was employed for the statistical processing of data. Descriptive statistics have been used in order for the frequencies of the responses to be ascertained for every level of the Likert scale. Moreover, inducting statistics have been used to define the extent to which there were differences in the average numbers of the responses between different groups of the sample. To be more specific, t criterion (t-test) and analysis of variance (ANOVA) are used.

The research took place from November 2012 to January 2013.

Results of the Research

Frequency of responses about the opportunities for in-service training programmes and the extent to which these opportunities are used

For the better presentation and comprehension of the frequencies of the responses we use a 3 level scale. In other words, the levels 1 and 2 of the 5 level Likert scale of the questionnaire which corresponded to "I totally disagree" and "I partially disagree" are reformed and coincide with "I disagree". In the same way, the levels 4 and 5 which corresponded to "I totally agree" and "I partially agree" coincide with "I agree", while the third level which corresponded to "I have no opinion" remains unchanged.

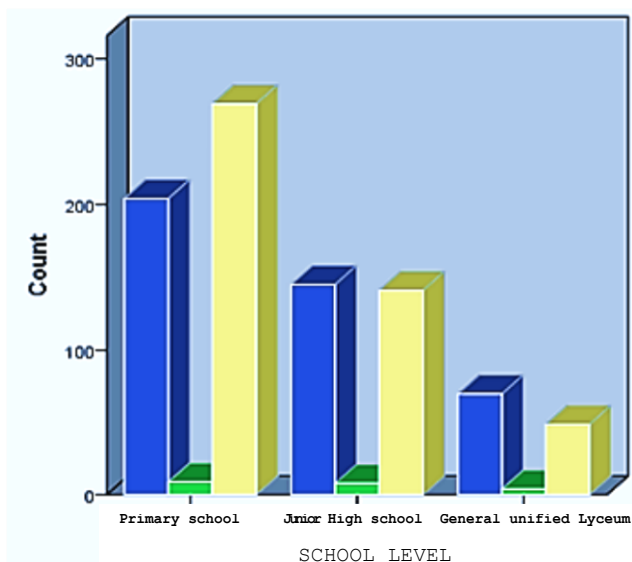


Chart 6: Educators'/principals' views about in-service training offered so as they can meet the requirements of their role

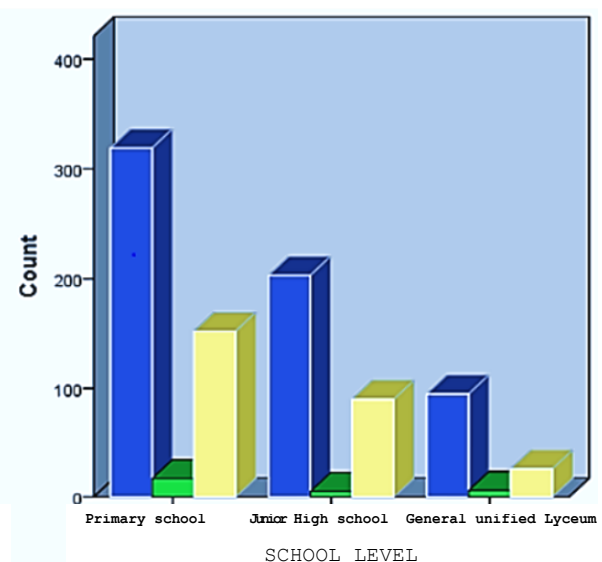


Chart 7: Educators'/principals' views about the opportunities for improvement/in-service training offered by the state

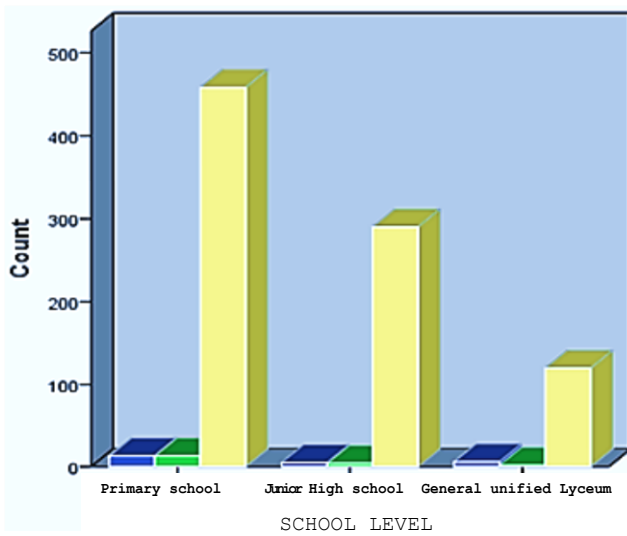


Chart 8: Educators'/principals' views about the pursuit of self-training

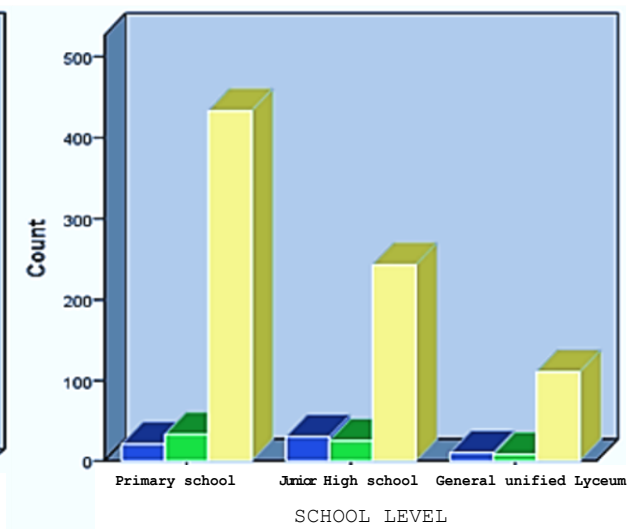


Chart 9: Educators'/principals' views about the encouragement to participate in in-service training programmes by their school administration

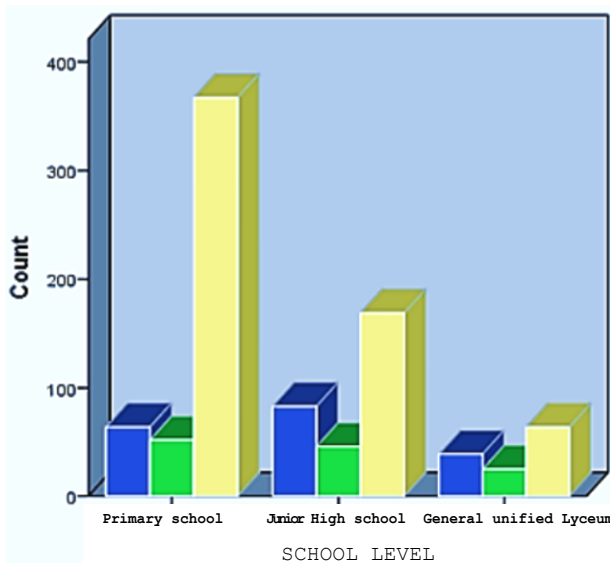


Chart 10: Educators'/principals' views about whether the administration of the school unit takes initiatives to provide information and training

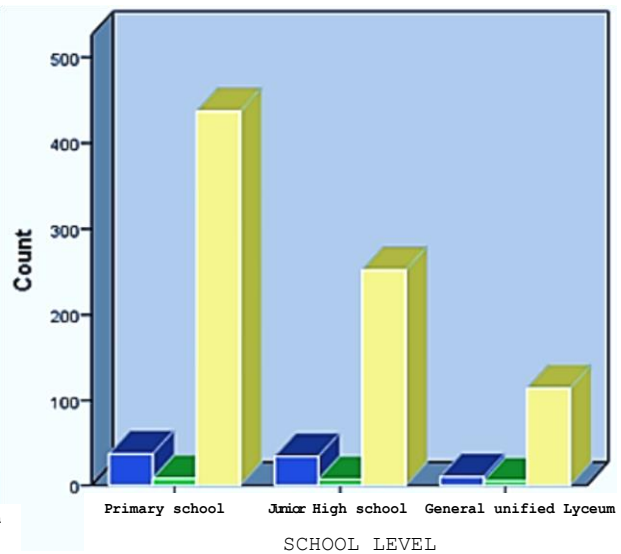
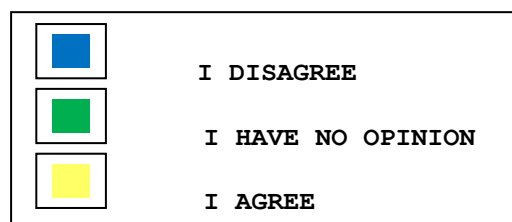


Chart 11: Educators'/principals' views about training through sample teaching in the school environment



Statistically important variances between the participants' views depending on the school level

The results from the analysis of variances (ANOVA) indicate that educators'/principals' views about the opportunities for training and the extent to which they are used present statistically important differences, depending on the school level they work in. Table 1 show the statistic indices that have occurred from the analysis of variances (ANOVA) and the Scheffe index. This index has been used to locate combinations of school levels where the educators and principals have different views.

Table 1: Statistic indices from the analysis of variances (ANOVA) about the statements which concern the opportunities for training and the extent to which they are used per school level

Statement	F	P	School Level	Average Number	Differences in Average Numbers			P				
I. My knowledge refreshment and updating which are offered are sufficient in order for me to meet the requirements of my role either as an educator or a principal	6,423	0,002	PRIMARY SCHOOL	3,09	PRIMARY SCHOOL	JUNIOR SCHOOL	HIGH	0,198	0,115			
			JUNIOR HIGH SCHOOL	2,89		LYCEUM		0,439	0,003			
			LYCEUM	2,65	JUNIOR HIGH SCHOOL	PRIMARY SCHOOL		-	0,198	0,115		
						LYCEUM		0,241	0,219			
					LYCEUM	PRIMARY SCHOOL		-	0,439	0,003		
						JUNIOR HIGH SCHOOL		-	0,241	0,219		
			II. The state offers me enough opportunities for improvement-training	4,777	0,009	PRIMARY SCHOOL	2,45	PRIMARY SCHOOL	JUNIOR HIGH SCHOOL	HIGH	0,125	0,393
						JUNIOR HIGH SCHOOL	2,32		LYCEUM		0,376	0,010
LYCEUM	2,07	JUNIOR HIGH SCHOOL				PRIMARY SCHOOL		-	0,125	0,393		
						LYCEUM		0,251	0,161			
		LYCEUM				PRIMARY SCHOOL		-	0,376	0,010		
						JUNIOR HIGH SCHOOL		-	0,251	0,161		
III. The administration of my school informs sufficiently about the in-service training programmes which are available	19,757	0,000				PRIMARY SCHOOL	4,66	PRIMARY SCHOOL	JUNIOR SCHOOL	HIGH	0,380	0,000
						JUNIOR HIGH SCHOOL	4,28		LYCEUM		0,066	0,726
			LYCEUM	4,59	JUNIOR HIGH SCHOOL	PRIMARY SCHOOL		-	0,380	0,000		
						LYCEUM		0,314	0,002			
					LYCEUM	PRIMARY SCHOOL		-	0,066	0,726		
						JUNIOR HIGH SCHOOL		0,314	0,002			
			IV. The number of in-service training programmes about which the administration of my school informs, satisfies the training needs of the educators or the principals	5,729	0,003	PRIMARY SCHOOL	3,24	PRIMARY SCHOOL	JUNIOR SCHOOL	HIGH	0,220	0,061
						JUNIOR HIGH SCHOOL	3,02		LYCEUM		0,374	0,012
LYCEUM	2,87	JUNIOR HIGH SCHOOL				PRIMARY SCHOOL		-	0,220	0,061		
						LYCEUM		0,153	0,517			
		LYCEUM				PRIMARY SCHOOL		-	0,374	0,012		
						JUNIOR HIGH SCHOOL		-	0,153	0,517		
V. The administration of the school unit encourages	4,795	0,008				PRIMARY SCHOOL	4,44	PRIMARY SCHOOL	JUNIOR SCHOOL	HIGH	0,212	0,010
						JUNIOR HIGH SCHOOL	4,23		LYCEUM		0,133	0,364

educators' participation in in-service training programmes			SCHOOL						
			LYCEUM	4,31		JUNIOR HIGH SCHOOL	PRIMARY SCHOOL	-	0,010
							LYCEUM	-	0,734
								0,079	
						LYCEUM	PRIMARY SCHOOL	-	0,364
							JUNIOR HIGH SCHOOL	0,133	0,734
								0,079	
VI.The administration of the school unit takes initiatives in order to inform and train educators	24,472	0,000	PRIMARY SCHOOL	3,96	PRIMARY SCHOOL	JUNIOR HIGH SCHOOL	HIGH	0,502	0,000
			JUNIOR HIGH SCHOOL	3,46		LYCEUM		0,670	0,000
			LYCEUM	3,29	JUNIOR HIGH SCHOOL	PRIMARY SCHOOL		-	0,000
						LYCEUM	0,502	0,425	
							LYCEUM	0,167	0,425
							PRIMARY SCHOOL	-	0,000
							JUNIOR HIGH SCHOOL	0,670	0,425
								0,167	
VII.Educators' further training should take place during the working hours	21,311	0,000	PRIMARY SCHOOL	3,91	PRIMARY SCHOOL	JUNIOR HIGH SCHOOL	HIGH	0,692	0,000
			JUNIOR HIGH SCHOOL	3,22		LYCEUM		0,211	0,340
			LYCEUM	3,70	JUNIOR HIGH SCHOOL	PRIMARY SCHOOL		-	0,000
						LYCEUM	0,692	0,007	
							LYCEUM	-	0,340
							PRIMARY SCHOOL	0,211	0,007
							JUNIOR HIGH SCHOOL	0,482	0,007
VIII.Educators' further training should take place beyond the working hours	9,155	0,000	PRIMARY SCHOOL	2,57	PRIMARY SCHOOL	JUNIOR HIGH SCHOOL	HIGH	-	0,000
			JUNIOR HIGH SCHOOL	3,06		LYCEUM		-	0,958
			LYCEUM	2,62	JUNIOR HIGH SCHOOL	PRIMARY SCHOOL		0,483	0,000
						LYCEUM	0,437	0,030	
							LYCEUM	0,045	0,958
							PRIMARY SCHOOL	0,045	0,958
							JUNIOR HIGH SCHOOL	-	0,030
								0,437	
IX.Further training should take place through lectures delivered in training centers	3,540	0,029	PRIMARY SCHOOL	3,35	PRIMARY SCHOOL	JUNIOR HIGH SCHOOL	HIGH	-	0,429
			JUNIOR HIGH SCHOOL	3,47		LYCEUM		-	0,035
			LYCEUM	3,68	JUNIOR HIGH SCHOOL	PRIMARY SCHOOL		0,123	0,429
						LYCEUM	0,330	0,312	
							LYCEUM	0,207	0,312
							PRIMARY SCHOOL	0,330	0,035
							JUNIOR HIGH SCHOOL	0,330	0,035
								0,207	0,312

Statistically Important differences between the participants' views depending on their individual and service characteristics

Participants who work in Primary Schools

The results of the t-criterion (t-test) application indicated statistically important differences between the educators'/principals' views of primary schools, according to the sex and the post of responsibility they fill, while the results of the analysis of variance (ANOVA) indicated statistically important differences in their views according to their age. In contrast, analysis of variance (ANOVA) presented that the participants' views are not differentiated on the basis of the number of years in service. Table 2 presents statistical indices which occurred from the t-criterion (t-test) application. This has shown in which statements the views of

educators/principals of primary schools are differentiated on the basis of their sex.

Table 2: Comparison of average numbers of educators'/principals' views of primary school according to their sex

Statement	Sex	Average Number	Differences in Average Numbers	t	p
I. The state offers me enough opportunities for improvement-training	MAN	2,640	0,265	2,117	0,035
	WOMAN	2,375			
II. The number of in-service training programmes about which the administration of the school informs, satisfy the educators'/principals' training needs	MAN	3,459	0,297	2,383	0,018
	WOMAN	3,162			
III. The administration of the school unit or the superintendents facilitate educators' participation in training programmes	MAN	4,366	0,239	2,379	0,018
	WOMAN	4,127			
IV. The administration of the school unit takes initiatives in order to inform and train educators	MAN	4,173	0,298	2,622	0,009
	WOMAN	3,875			

Participants who work in Junior High Schools

The results of the t-criterion (t-test) application indicated statistically important differences between the educators'/principals' views of junior high schools, according to the sex and the post of responsibility they fill, while the results of the analysis of variance (ANOVA) indicated statistically important differences in their views according to their age and years in service. Table 3 presents statistical indices which occurred from the analysis of variance and the indices which are mentioned in the Scheffe index. The latter index has been used to locate group of educators/principals of junior high schools with different views according to their years in service.

Table 3: Statistical indices from analysis of variance about the opportunities for in-service training programmes and the extent to which these opportunities are used by educators/principals of junior high schools according to the number of years in service

Statement	F	p	Years in service	Average Number	Differences in Average Numbers	p	
I. The administration of the school unit encourages educators' participation in in-service training programmes	4,067	0,001	1-5	4,17	6-10	0,405	0,637
			6-10	3,76	11-15	-0,103	0,999
			11-15	4,27	16-20	-0,405	0,698
			16-20	4,57	21-25	-0,225	0,966
			21-25	4,39	26-30	-0,218	0,978
			26-30	4,38	1-5	-0,405	0,637
			6-10	11-15	-0,508	0,247	
			16-20	21-25	-0,631	0,073	
			26-30	-0,623	0,135		
			1-5	0,103	0,999		
			6-10	0,508	0,247		
			11-15	16-20	-0,302	0,843	
			21-25	-0,123	0,997		
			26-30	-0,115	0,998		
			1-5	0,405	0,698		
			6-10	0,810	0,007		
11-15	0,302	0,843					

	21-25	0,179	0,982
	26-30	0,187	0,984
	1-5	0,225	0,966
	6-10	0,631	0,073
21-25	11-15	0,123	0,997
	16-20	-0,179	0,982
	26-30	0,008	1,000
	1-5	0,218	0,978
	6-10	0,623	0,135
26-30	11-15	0,115	0,998
	16-20	-0,187	0,984
	21-25	-0,008	1,000

Participants who work in General Unified Lyceum

In the case of educators/principals of general unified lyceum t-criterion (t-test) application indicated statistically important differences in the way they respond depending on whether they fill a post of responsibility or not, while the sex seems that it did not influence significantly their views. Correspondingly, from the application of analysis of variance (ANOVA) differences in their views on the basis of their age and years in service didn't occur. Table 4 presents the statistic indices which occurred from the t criterion (t-test) application in order to locate statements about which the participants' views differ on whether they fill a post of responsibility or not.

Table 4: Comparison of average numbers of views of educators/principals who work in general unified lyceum. The views are about the opportunities for training and the extent to which these opportunities are used on the basis of the post people fill

Statement	Post of responsibility	Average Number	Differences in Average Numbers	t	p
I. My knowledge refreshment an updating which are offered are sufficient in order for me to meet the requirements of my role either as an educator or a principal	YES	3,42	0,861	2,198	0,030
	NO	2,56			
II. Educators' further training should take place during the working hours	YES	2,75	-1,055	-2,346	0,021
	NO	3,81			
III. Educators' further training should take place beyond the working hours	YES	3,67	1,158	2,516	0,013
	NO	2,51			
IV. Training should provided only through sample teaching in the school environment	YES	3,58	-0,680	-2,389	0,018
	NO	4,26			
V. Exchanges of views among colleagues about issues which refer to teaching/administrative work provide the opportunity for self-improvement	YES	4,92	0,317	2,954	0,006
	NO	4,60			

Conclusions

During the process of data of this research, it was observed that educators in junior high-schools and lyceums respond in a different way. For this reason they are presented separately from each other, although they belong to the same school level.

As for the first research question and the opportunities for training offered to educators, the research data show that the vast majority of educators/principals of primary schools think that the offered in-service training programmes are sufficient. In contrast with them, the educators who work in junior high schools and lyceums believe the opposite. We observe that the higher the school level is, the bigger the percentage of those who disagree over the sufficiency of training programmes and the satisfaction of their needs is (Chart 6). Therefore the need of differentiation of the offered training programmes is obvious. In this way all the different needs of educators and principals during their professional career will be satisfied. This necessity is verified by the research of Pedagogical Institute (2008) in which the lack of training programmes concerning their quality and satisfaction of training needs is an restraining factor in attending these programmes.

As far as the opportunities for training which are offered by the state are concerned, educators'/principals' views of all school levels coincide. In this way, the deficiency of the Ministry of Education to provide educators with opportunities for improvement and development is obvious (Chart 7). It seems that educators' professional improvement is something which is not given priority by the state or it is not particularly clear how their professional improvement is achieved through regular and organised training which is something verified only by the research data collected as far as now. This is also concluded by Papanau's research (1995) and Pedagogical Institute (2008). However, educators and principals of the three school levels (Primary schools, Junior High schools, Lyceums) are presented highly sensitized to the issue of their professional competence which they pursue only by taking their own initiative and using the available training programmes (Chart 8), something which is verified by the relevant research conducted by Yfanti and Vozaiti (2007).

As for the role of the school unit administration and the superintendents in the educators' information, encouragement and facilitation of their participation in training programmes the three groups show highly degree of satisfaction (Chart 9). The principal/superintendents seem that they have realised the necessity of essential enhancement to educators in order for them to meet effectively their role responsibilities, especially in our time and age when big and fast changes happen. Educators should be ready to follow these changes. According to a research conducted by the Pedagogical Institute (2008) one out of ten educators have difficulties from their agency. As for insufficient information, it consists the second main difficulty of educators in participating in training programmes after the difficulty of shortage of time.

As far as the initiatives for training are concerned which are taken by the school unit administration, an important percentage of those who work in junior high schools and lyceums remains unsatisfied (Chart 10). As it is shown, the junior high schools and lyceums administrations do not realise sufficiently their role as vehicle of changes and culture formation in the school unit. Furthermore they have not realised the importance of taking initiatives for training in creating a positive climate among colleagues, in educators' professional reinforcement and in their encouragement to intensify their efforts. According to Georgiadis etc. (2005), a lot of principals consider the economic cost as an objective difficulty in taking initiatives for training. The fact is that something like that

should not be a preventing factor in taking such initiatives. On the contrary, it should be treated as an economic investment which is multiplied and transported into the target group namely the educators and by extension to the pupils.

As for the time in which the training programmes take place that is during or beyond the working hours, educators'/ principals' views are divided on this issue. For this reason further investigation is necessary. Relevant studies (Res 2006b, Pedagogical Institute 2008, Pedagogical Institute 2010, Darra & Saitis 2010, Papaioannou etc. 2013) highlight the steady request from educators for training during the working hours, which will belong institutionally to the school routine of educational institutes. In this way training will stop being considered as an "extra-curricular" element. Emphasis will be given to the peculiarities of every school unit which are influenced and formed by the local needs and peculiarities of every society to a great extent.

Concerning the methodological approach of the training programmes the vast majority of the educators/principals of the three school levels are in favour of training through sample teaching in the school environment (chart 11), without rejecting training through lectures in training centres. What is certain is that theoretical learning and its importance in educational practice is not undervalued. However it is true that the value of theories is diminished when the training programmes happen beyond school context/ environment, educational experiences and problems. The connection of training with educational practice and the practical problems of educators and schools they meet when they struggle to satisfy the real educational needs, is reinforced by the results of researches conducted by Yfanti & Vozaitis (2007), Pedagogical institute (2010), Papaioannou etc. (2013).

Almost all the educators from the three groups claim that exchange of views with colleagues about issues that concern teaching/administrative practice offers the opportunity for self-improvement. As the research conducted by Yfanti & Vozaitis (2007) all the educators seem to be receptive in new ways professional improvement which are fostered in their working environment.

Concerning the second research question, our findings show that the school level influences educators'/principals' views about whatever is relevant to their training (Table 1). Therefore, principals of primary schools are more sensitized to training issues than principals of junior high schools and they are convinced that educators' professional development is necessary, prominent and for this reason they encourage the educators more to participate.

Educators/principals of lyceums seem to have increased training needs in comparison with educators in primary schools due to the high demands of their teaching objects and the complex situation they have to deal with (misbehaviour incidents from pupils), and for this reason they consider the training they receive ineffective in satisfying their needs and quite few the opportunities for training offered by the state.

Concerning the methodological approach of the training programmes those who teach in lyceums seem to be more positive than educators/principals of primary schools towards lectures in training centres.

Primary schools and lyceums administrations seem to be more punctual towards educators' information about training programmes that take place in comparison with high school administrations. This may be connected with the sensitivity shown from principals of primary schools in training issues, which as it mentioned above, it is displayed by the encouragement of educators to attend training programmes. However, as far as principals of lyceums are concerned, this sensitivity is expressed through the recognition of the increased needs of those who teach in lyceums.

Findings about differentiation of educators'/principals' views of all school levels about the time of implementation of training programmes are of high interest. Those who teach in primary schools and lyceums are in favour of training which takes place during the working hours, while those who teach in high schools prefer to attend training programmes beyond working hours.

Last but not least primary schools administrations seem to be more active in taking initiatives for information and training of educators.

As far as the third research question is concerned, our research data show that educators'/principals' views are influenced both by their individual and their service characteristics. More specifically, participants' responses differ according to their sex. In this way, women educators in primary schools seem to be less satisfied with training opportunities offered by the state. They are also less satisfied with the fulfilment of their training needs and facilitation they enjoy from their school unit administration. Moreover, they are in favour of a more active administration in taking initiatives for training and information of educators (Table 2). Women educators in junior high schools agree with this claim and they confess that they use the training opportunities offered to the greatest extent and they prefer to be educated during the working hours in contrast with their male colleagues who prefer the opposite.

In case of educators who teach in primary schools and junior high schools, their views are influenced not only by their age, but also by the years in service they have. To be more specific, educators in primary schools at the age of 35-44 years old are less satisfied than their colleagues at the age of 45-54 years old concerning the information they receive from their school unit administration about the training programmes offered. As for those who work in junior high schools, educators at the age of 23-34 years old highlight the deficiency in their information, encouragement and facilitation they receive from their administration in order to attend training programmes in comparison with those who belong to the age group of 45-54 years old.

In addition to this, educators in junior high schools who have less years in service (6-10 years) do not seem to be satisfied with the encouragement to participate in training programmes, in comparison with their colleagues with 16-20 years in service (Table 3).

It is true that if the participants fill a post of responsibility, then this seems to differentiate their view. Those who fill a post of responsibility in primary schools and lyceums (Table 4) seem to be more satisfied with the opportunities for improvement that the state offers and the competence of training programmes which will help them

to meet the responsibilities of their role. This is not verified by the relevant researches (Papathomas 2006, Pedagogical Institute 2010). Additionally, they promote training which happens beyond working hours. As for the findings about educators in junior high schools who do not fill a post of responsibility, they are important too. According to these data, those educators mentioned above are not presented to be satisfied with the information, encouragement and facilitation which they enjoy from their school unit administration in order for them to participate in training programmes.

Insights-recommendations

The debate over the quality of education in an international level dates back from the 1970's. The issue of quality assessment in education exists in European Union from the 1990's, since the quality and the effectiveness of the educational systems of the countries-members are considered as decisive vehicle of development. In the context of contemporary social, economic, cultural and technological changes that take place not only in European Union, but in all over the world, it is absolutely necessary for the educational systems to be reformed.

Our research data point to the conclusion that the two principles of TQM which we have already put under investigation, are implemented to a quite satisfactory extent, in some cases. However this is not the rule, since there are cases that these principles are not implemented. What is certain is that there is fertile ground and willing educators/principals who are ready to incorporate the TQM philosophy into their school unit administration. Something which is urgent is the fact that the state should realise the necessity of achievement and reassurance of the quality of educational practice, educators and all the procedures which are included in the learning processes and educational benefits. This happens because society is the final recipient of the educational product and it experiences goods and services of low quality which is a result of the low quality of education and vocational training that the society itself offers. The incorporation of TQM into the educational administration will create schools with culture of high-quality. These schools will be efficient, and capable to follow and adjust themselves to the international changes. Also, these schools will satisfy the expectations of their members, the needs of their "clients" and generally the society.

The achievement of the educational practice quality takes place mainly through the professional development of educators. Therefore, the state has to realise the need and should make progress immediately in designing and implementing a training policy which will have a lifelong perspective and it will be organised in accordance with the principles of adult education. This will be a training policy which will always adjust and specialize its goals and content in specific needs of educators, school unit and school level it addresses to. This training policy has to actively involve educators in its designing, implementation and evaluation. Its goal should be the reinforcement, strengthening and updating, according to the new scientific data, knowledge, abilities and skills of educators. Through this process educators become stronger and their professionalism take form. The prerequisite of this is the fact that this policy should be consistent, punctual, regular, continuous, coherent and to treat educators as a vehicle of changes and formation of school culture.

Recommendations for future research

A complete insight will be offered if a future research could include in its sample educators who teach in all the types of schools of the secondary school level. Apart from the all day junior high schools and all day general unified lyceums, educators who work in evening junior high schools, evening general unified lyceums, all day technical schools and evening technical schools have to be examined. In this way more light will be shed on whether educators' views about training opportunities are different according to the type of school the educators work in.

Another parameter which could be investigated further is the educators' views which work in private schools of primary and secondary level so as any differences with their colleagues' views in the public sector about training could be spotted.

One of the fundamental principles of TQM is the focus on the needs and expectations of the clients of the institute. Children's parents are the "clients" of the educational system. In this context the investigation of their views with regard the extent to which their expectations are satisfied from the educational system becomes interesting from a scientific perspective.

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