The Environment and Operation of Secondary School Units in the North Aegean Region

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Abstract

In order for educational organizations, or otherwise educational units, to accomplish their purpose, effective management is a prerequisite. The ultimate goal of this research is to examine the environment and operation of the school unit. More specifically it examines the problems of the school unit, the effectiveness of communication, the prevailing climate, the abilities of the principal and the existence of an evaluation method. The method adopted for the study is the classified cluster sampling method. In this context, 312 questionnaires were sent to all 104 secondary schools of the North Aegean (Lesvos, Chios, Samos, Ikaria, Limnos, Fourni, Oinousses, Psara, Agios Efstratios). Out of the 312, 148 were returned completed. This means a 47.44\% response rate. As regards the way the school unit operates, research has shown that it does not lack cooperation among school unit members, effective leadership, adequate guidance and encouragement from teachers, or effective communication. Specifically, on the question of communication, respondents' answers show that communication between school unit members and parents as well as between the school unit and the local community is to a moderate or to small extent effective. Regarding the issue of leadership, respondents' answers indicate that almost half of the teachers believe that the principal in the school unit they serve has the necessary skills and abilities to meet the requirements of this position. Another feature of the operation of the school units involved in the survey is the lack of school evaluation. At this point it is worth pointing out that the results of the research show that the problems faced by the majority of the school units involved in the survey are, according to the respondents' answers, due to the ineffective organization of the educational system itself and consequently of the school units as well, namely the bureaucratic and centralized model, which does not provide flexibility for school units and teaching staff to take initiatives in order to enhance the educational process.

Keywords: Organization, administration and operation of the school unit

1. Introduction

Attempting a historical review about school effectiveness, we firstly conclude that the question of school effectiveness arose when the socio-economic changes, which took place in the first half of the 20th century, functioned catalytically for the research of the factors contributing to effective operation of the school. (Pamouktsoglou, 2001; Passiardis and Passiardi, 2006). The school has a significant effect on the development and improvement of pupils (Pamouktsoglou, 2001) and, aiming at its effectiveness, special emphasis is placed on interpersonal relationships and communication among the participants in the educational process (Passiardi and Passiardi, 2006). In the context of the effectiveness of the school unit, Lezotte (1989, as quoted in Passiardi and Passiardi, 2006, 17) argues that "a school is considered effective when it is able to show that in it coexist both the quality of the education provided and equal opportunities for all, namely equality". According to Mrs. Anagnostopoulou (2002), (as quoted in the National Research Report for Greece, 2008), a school is considered to be effective when it combines quality of education and equal opportunities for all.

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Referring to the quality of education, Mr. Fasoulis (2001, 188) argues that quality "means the ability of the educational staff to provide effective education" and "besides that 'quality' of management is also required, i.e. guidance, motivation, exploitation of resources, educational improvement; concluding that the chain reaches the top leadership of education through the requirement for quality or effective management". This again means that the educational staff should be characterized by quality management, i.e. guidance, training and motivation, through the quality and effective management of the educational unit. According to Mr. Fasouli (2001), two are the elements that we distinguish for the educational unit efficiency: teachers and leadership of the school unit. The tools that are used are culture, goals, organizational structure, environment, and primary procedure. As regards the factors that contribute to school effectiveness, the above analysis has shown that there is an inseparable link between school unit leadership and school effectiveness. An effective school principal-leader assists and supports teachers, while overseeing the educational work, and also encourages and promotes the involvement of teachers and parents in the decision-making process, which leads to the commitment of teachers to the school organization and increases their job satisfaction and performance. Fullan and Steigelbauer (1991), (as quoted in Dean, 1993) highlight four factors that characterize the successful process of improving the school unit. These factors are: recognition of the improvement process by the school leadership, interaction and communication both between school members and between the school unit and the local community, the existence of a system of values, as well as cooperation between school members, and between them and society, to design and implement the selected strategies. In addition to the above, Caldwell and Spinks (1988), (as quoted in Dean, 1993) emphasize that in an effective school there is a high degree of involvement of the educational staff in the development of the school objectives, participation of both teachers and the local community in the decision-making process, a high degree of coherence and a spirit of cooperation among teachers, and finally there is an opportunity for the appropriate participation of teachers, pupils and the community in the process of resource allocation. Another very crucial factor for school effectiveness is the role of the teacher. Although the definition of effective teaching is difficult in any education system. Eisemon et al., (1993) suggest that in countries where national exams are used as a means of delivering educational opportunities, as in the case of Greece, the teacher whose students have high success rates can be considered as effective. However, some common elements of teacher's effectiveness in almost all countries include the exploitation of teaching time, the coverage of curriculum content and the student attendance (Eisemon et al., 1993). Glickman (1998) states that teachers, in addition to the knowledge and skills that they need to possess in order to provide their educational work, should also be leaders in order to promote a positive climate in school, enhancing the role of school as an individual and collective community. Other researchers also emphasize the role of the teacher - leader as a critical factor that promotes school effectiveness but also the communication between the school unit and the local community. More specifically, it is argued that the improvement of the school unit and its effectiveness is greatly enhanced by the leadership of teachers as a part of a more general leadership system that affects the actions of all those involved in the educational process (Foster, 2005). Apart from the above, however, there are some other factors that contribute to the effectiveness of a school unit. For example, Scheerens (2000) points out that the factors contributing to school effectiveness are categorized into the following groups: a) objectives, b) structure of the organization, c) structure of processes, d) culture, (f) the primary procedure.

2. Methodology

According to the relevant literature (Jonker & Pennink, 2003), the two methodologies available are qualitative and quantitative. Quantitative research is largely structured and produces objective data that can be quantified and statistically processed, whereas qualitative research is interpretive and produces descriptive data, taking into account the diversity of subjects and arguing that reality is not objective, but is shaped by the opinions, attitudes and behaviours of individuals (Scanlon, 2001). For the purpose of the present work, quantitative research was selected. According to Creswell (2002) the two main methodological tools used in quantitative research are experiments and surveys using questionnaires or structured interviews. For the purpose of this study, the questionnaire was used as the most appropriate methodological tool. The questionnaire is a practical data collection tool that provides numerical data, can be delivered without the presence of the researcher, while it is easy to understand and easy to analyse (Wilson & Mclean, 1994), as its data can be easily coded, and produce results (Dornyei, 2003). Also, the anonymity provided while completing the questionnaire, as well as the high degree of validity and reliability, probably encouraged the respondents to participate, something that, we presume, provided a larger sample for our survey. This was another factor that we also took into consideration for choosing the questionnaire as a research tool (US Office of Personnel Management, 2008).
The questionnaire consists of three sections and a total of 25 questions. The first section consists of questions 1-11 and refers to the demographics of the respondents: gender, age, school district, years of service as a teacher at the specific school, specialty, marital status, studies, writing activity and training seminars attendance or management post-training studies. The second section consists of the questions 12-21. This section includes questions that examine the environment and operation of the school unit. More specifically, it examines the problems of the school unit, the effectiveness of communication, the prevailing climate, the abilities of the principal, the existence of an evaluation method, the criteria on which the selection of educational staff should be based, and the degree to which teachers are happy with the quality of the educational process in the school unit they serve. The third section consists of questions 22-25. This section includes questions about the strengths and weaknesses of the school unit in which the respondents serve, examines the need to change the administrative model of both the educational system and the school unit, and invites teachers to suggest ways to improve the organization, administration and operation situation of the school unit in which they serve. The method adopted for the study is the classified cluster sampling method (Cohen et al., 2007). According to this method, clusters are initially defined, which in this case are Secondary School Units. The clusters are then classified according to their characteristics, which in this case was the geographical feature: they all belonged to the North Aegean Region. In this context, 312 questionnaires were sent to all 104 secondary schools of the North Aegean (Lesvos, Chios, Samos, Ikaria, Limnos, Fourni, Oinousses, Psara, Agios Efstratios). Out of the 312, 148 were returned completed. This means a 47.44% response rate.

3. Results of The Statistical Analysis

3.1 Demographic data

1. Gender

86 men (58.1%) and 62 women (41.9%) took part in the study.

2. Age

As can be seen from the graph below, the majority of respondents (28.4%) are 46-50 years old. Following are those aged 36-40 years (20.3%), 31-35 years (15.5%), 51-55 years (14.2%) and 41-45 years (13.5%). 4.1% are 25-30 years old, 2.7% are 56-60 years old, and there is a 0.7% (one person) aged over 60.

3. Region of the school where the respondents work

In terms of the region to which the school where the respondents work belongs, the majority (49.3%) work at schools in Lesvos, 15.5% in Chios, 10.1% in Lemnos, 9.5% % in Samos, 6.8% in Ikaria, 4.1% in Psara, 2.7% in Agios Efstratios and lastly 2% in Fourni.

4. Years of service as a teacher

The majority of the respondents (26.4%) have been working as teachers for 6-10 years. 25% have a teaching work experience of 11-15 years, 22.3% have been working as teachers for five years, 14.2% over 20 years and 12.2% for 16-20 years.

5. Years of service in the particular school

The majority of the teachers who participated in the survey (68.9%) served in the particular school unit for up to five years. 16.9% have been working in the same school for 6-10 years, 10.1% for 11-15 years, 3.4% over 20 years and 0.7% between 16-20 years.

6. Specialities

As can be seen from the graph below, the majority of teachers (23.6%) are physical education teachers (PE* 11), while 23% are language teachers (PE 02). 10.1% are mathematics teachers (PE 03), while the same percentage stated that they are physics/chemistry/biology teachers (PE 04). 8.8% are theology teachers (PE 01), 6.1% are English teachers (PE 06), 5.4% are German teachers (PE 07), 3.4% are French teachers (PE 05), 4.1% are IT teachers (IP 19), while 2% are art teachers (PE 08) and teachers of economics (PE 09). Finally, one person (0.7%) is a chemistry-mineralogist (PE 12) and also one person is a teacher of accounting (PE 18). *PE = Speciality Code

7. Marital Status

With regard to the teachers’ marital status, 45.9% are married with children, 27.7% are single, 14.9% are married without children, 10.1% are divorced, and there is one person (0.7%) who is widowed.
8. Attendance of administration training seminars

The majority of teachers (58.8%) stated that they have attended management seminars. 3.4% (5 people) did not answer this question.

9. Further training in administration

Out of the 75.7% of the respondents who answered this question, 53.4% (70.5% of all teachers) stated that they have not been trained in administration, as opposed to 22.3% of the teachers. (29.5% of the teachers in total).

10. Writing activity

73% of teachers reported that they did not develop writing activity as opposed to 25% of the respondents. Also, it is noteworthy that 2% (three people) did not answer this question.

11. Other, beyond basic, studies

Out of the 62.2% of the teachers who answered this question, 32.4% (52.2% of all teachers) stated that they had a postgraduate degree, 4.7% (7.6% of teachers in total) has another university degree, only 4.1% (6.5% of all teachers) has a doctorate degree, while 20.9% have had other studies (33.7% of teachers in total).

3.2 Environment and Operation of a School Unit

1. Problems of the school unit in which the respondents serve

As can be seen from the graph below, the teachers that participated in the survey consider that to a moderate extent there is lack of school culture (32.4%). Also, to a small extent, teachers consider that the school unit they serve is characterized by the following problems:

- Inappropriate building facilities (46.6%)
- Inappropriate teaching method (46.6%)
- Lack of logistical infrastructure (37.2%)
- Unclear goals and objectives of the educational process (37.2%)
- Lack of school vision (30.4%)

In addition, teachers consider that the school unit in which they serve does not suffer from any of the following problems:

- Lack of cooperation among school unit members (51.4%)
- Poor lighting / heating (38.5%)
- Ineffective leadership (37.8%)
- Inadequate guidance and encouragement to teachers from leadership (34.5%)
- Lack of effective communication (33.8%)

Effectiveness

2. Communication between the members of the school unit 48.6% of the teachers responded that communication between school unit members is to a great extent effective.

3. Communication between school unit and parents 41.2% of the teachers responded that communication between the school unit and parents is effective to a moderate extent.

4. Communication between the school unit and the local community 29.1% of the teachers responded that communication between the school unit and the local community is to a small extent effective.

Reasons for ineffective communication

As regards to the reasons for the ineffective communication, a teacher reported that the reason was the school principal and another, the frequent relocation of teachers. The following reasons were also mentioned:

- Lack of vision from school management
- Lack of interest from the local community
- Disregard for the school due to party rivalry and the political and party positioning of the local community and the school unit bodies
- Indifference of parents, teachers’ association and the local community about the school problems
- The human factor and bad interpersonal relationships
- Lack of a cooperative communication culture
- Disconnection between school and society
- The local community is particular and not easily approachable
- Lack of motivation

Finally, according to a teacher: “School has generally been cut off from society. School is not the steam engine of evolution and modernization of society and young people, as it used to be. The technological development, which was quickly adopted by young people, made school more conservative and detached.”

5. Climate effectiveness at the school units where the respondents serve

The majority (50.7%) of the teachers (52.1% of all answers) consider the climate in the school unit they serve in to be at a great degree effective. **School principal's skills and abilities** Respondents' answers indicated that school principals should:

6. Be leaders
7. Have high motivation and goals
8. Make all educational staff feel as a whole
9. Support teachers if they fail, and understand their problems
10. Award and remunerate when needed, and acknowledge success
11. Solve problems effectively
12. Create a positive climate at school
13. Be consistent in their views
14. Be communicative
15. Be sensitive
16. Be insightful
17. Be methodical
18. Be impartial
19. Not be formalists and function substantially
20. Bridge differences and be effective in crisis management
21. Strengthen school morale
22. Be democratic, fair, humane and uphold the truth
23. Be politically acute so that they can handle multiple demands, and they should behave in such a way that, on the one hand, they are acceptable while on the other they ensure the necessary internal autonomy for responsible decision-making
24. Have the capacity to make decisions at the individual and collective level
25. Be well informed on administrative and organizational issues
26. Be in control and possess persuasion skills
27. Contribute to the personal and professional development of teachers
28. Be interested in guiding the school in pedagogical and scientific matters
29. Coordinate the learning process
30. Play a leading role in maintaining the proper operation of the school unit
31. Have excellent computer skills and be innovative
32. Be versatile, which means being both a teacher and a psychologist
33. Love children
34. Have passion and enthusiasm
35. Arrive at school early and devote many hours to it
36. Be flexible as regards to the schedule and be open-minded
37. Distribute responsibilities
38. Cooperate with other school units
39. Be patient
40. Be intelligent, determined, courageous and honest
41. Have faith in the educational system.
6. The necessary abilities and skills of the principal in the school units where the respondents serve

45.3% of the teachers consider that the principle of the school they serve in has the necessary skills and competencies to meet the requirements of his/her position.

7. Features that distinguish the principal of the school unit in which the respondents serve

Teachers believe that the features that mostly distinguish the principle of the school unit in which they serve are:

1. Creating a positive climate (41.2%)
2. Effective conflict resolution (37.2%)
3. Problem-solving in the most effective and appropriate way (37.2%)

Also, to a great extent respondent mentioned the following:

4. Transfer of vision to teachers (45.3%)
5. Vision for the future (42.6%)
6. Establishing priorities (42.6%)
7. Strengthening school morale (42.6%)
8. Ability to promote the necessary changes (41.2%)
9. Adaptation of the school to the new teaching methods required by the information and communication society (39.2%)
10. Increasing teachers' job satisfaction and consequently their performance (38.5%)
11. Effective learning process (38.5%)
12. Communication with teachers and parents (37.2%)
13. Promoting teacher participation in the decision-making process (36.5%)
14. Strengthening social justice (36.5%)
15. Critical awareness cultivation (35.10%)
16. Strengthening the democratic spirit (33.8%)
17. Cultivating awareness (41.9%)
18. Contribution to the personal and professional development of teachers (33.8%).

School unit evaluation method

The overwhelming majority of the teachers who participated in the survey stated that they did not use any method in order to evaluate the school unit.

How the evaluation is conducted

One of the teachers reported that there was no specific person designated to supervise the teachers while counselor visits to the school were seldom. Nevertheless, the school principal supports teachers and assists them with their problems, but does not evaluate them. The consultants seldom visitation was highlighted by yet another teacher, who said that the evaluation was done by the principal, noting at the same time that this did not make it objective because of the teachers' good or bad relationships with the person evaluated. In the same context, another participant in the study emphasized that the evaluation is subjective. A teacher reported that self-assessment is conducted at the teachers’ association as well as evaluation of the school unit according to sustainable school indicators. Another teacher answered that "self-assessment is done during pedagogical meetings" and "assessment of the school unit is conducted according to sustainable school indicators". Evaluation is also conducted through the collection of material from various student activities. Another method for evaluating the educational work "by drafting an annual report per teacher", was also mentioned, as well as "self-assessment through the degree of satisfaction of pupils and the local community". According to another research participant, teachers ask the principal's opinion on issues related to their subject, in case he/she hasn’t offered his/her advise already. Another teacher mentioned the same evaluation method, stating that "the principal evaluates and advises us on situations presented as regards our teaching subjects." A teacher mentioned that no method of evaluating the school unit is used, probably because the school is far from the city center, nevertheless it was emphasized that "the counselor comes 2-3 times a year, so we have some feedback on our lesson and its quality". Other methods of evaluation are the pedagogical meetings, as well as the evaluation report in June. The principal's annual report on the operation of the school was also cited as another method of evaluation. Another form of evaluation is formative assessment, where 'teachers decide how to implement an action together. After completion, the results are evaluated and conclusions are drawn. If the action is to be repeated next year, there is experience and implementation is evidently better."
Reasons why evaluation is not conducted

One of the reasons why there is no evaluation conducted is the location of the school unit where teachers serve, which is remote. As a teacher typically said, "who can evaluate us here, we are forgotten by all."

Regarding the lack of evaluation, it was pointed out by one teacher that "there is no specific model preferred by the ministry itself. Evaluation is done through discussions between colleagues." One of the respondents stated that "no importance is given. It is thought that there will be no change," while one participant stressed that there is "fear of negative evaluation". According to another view, there is no evaluation method because "the trade union interests and policies promoted by the parties through trade unionists refuse any form of evaluation and meritocracy because they do not want to lose control over the system and the people. „In general, teachers' responses indicate that evaluation does not take place due to lack of interest and therefore lack of an institution for evaluation.

8. Bodies that should conduct the evaluation process

To a large extent, teachers believe that the evaluation should be conducted by teachers' association (69.6%). Subsequently follows the evaluation by the teachers themselves (52.7%), the school counselor (40.5%), the school principal (23.6%), while only 6.8% reported that evaluation should be done by another body, in particular:
By a combination of the members of the school system
By the students
By the parents
By an independent body (educational authority with principals, school counselors and qualified scientists)

9. Respondents' satisfaction as regards the quality of the educational process in the school unit they serve

To a large extent, 44.6% of the teachers that participated in the survey stated that they were satisfied with the quality of the educational process in the school unit they serve.

10. Criteria for the selection of the education executives 65.5% of the teachers stated that the selection of highly qualified staff will mostly be based on meritocratic criteria. Next are administration qualifications (44.6%), the exam promotion system (35.8%), seniority (35.1%) and finally the opinion of teachers' association (13.5%).

3.3 Problem identification and suggestions for improvement Problems (weaknesses) of the school unit where the respondents serve

Respondents' answers indicated that there were problems regarding the following:

19. Building and facilities (some teachers reported that there were prefabricated classrooms, while other schools reported that sometimes they face problems with water, heating and electricity).
20. Logistical infrastructure (lack of sports facilities and sports equipment, lack of equipment for the chemical laboratory, old computers, lack of photocopier paper)
21. Timely recruitment of the necessary teaching staff
22. Remote, inaccessible school locations and bad weather conditions, which may result to the following: a) isolation mainly in wintertime, with no connection to other areas, b) burden teachers' psychology, c) events cannot be held and people who may have been invited to speak or otherwise contribute to the educational process cannot come
23. Diminished quality of the educational work provided, especially in areas with poor social conditions
24. The school principal, as well as the authoritarian, in some cases, administration
25. Frequent rotation of the educational staff, mainly due to the inaccessibility of the area
26. Moderate or even poor administration
27. Teachers' financial problems
28. The existence of many foreign students and the conflicts that arise with the local, but also the conflicts among students from different countries
29. Lack of vision
30. Parents' minimal interest and participation in the learning development of their children
31. Poor relations with local authorities, because due to political rivalry no one helps the school
32. The low level of students
33. The lack of a psychologist for 'problematic' cases
34. The fact that there are no initiatives and no activities aimed at upgrading the quality of education provided
35. The indifference of many students to learning and the depreciation of school
36. Students' antisocial behaviour
37. Lack of respect for and observance of rules by students, coupled with looseness in the penal system, since
students are not adequately punished
38. Lack of school culture

Finally, it is worth mentioning the opinion of one of the respondents that the main problem is the "pupil
human resources related to the production of potentially illiterate, during the nine-year compulsory education and their exclusive absorption
by the Vocational education".

Strong points of the school unit where the respondents serve

Respondents' answers indicated that the strengths of the school units involved in the survey were:

39. Administration
40. The teachers' association (human resources in general)
41. The very good school climate that derives from all the participants
42. The climate of unity and communication between teachers but also between teachers and the school principal
43. The organization, environment and high quality of human resources
44. Responsibilities assigned to the teachers by the principal in order to make teachers more accountable
45. Support by the municipality and Parents' Association
46. The building infrastructure, the indoor gym and other sports areas
47. School location
48. A lower number of pupils in each class in comparison to other school units
49. Collaboration, creativity and innovation
50. Rich and frequent activities (such as school participation in workshops)
51. The morale of students and teachers
52. The strong sense of democratic processes
53. Teachers' association with few members that results in better communication
54. Financial independence of the school unit due to donations from local institutions
55. The technical competence and the variety of opportunities that the Vocational High School offers in theory
to its graduates
56. Implementation of environmental education, health education and cultural education programs

Teachers' overwhelming majority reported that the strong point of the school unit is the good climate and the
spirit of cooperation between the school unit members and in particular the excellent interpersonal relationships
between teachers, but also between teachers and the principal, with the latter providing assistance and support for
teachers and the problems they face; the main problem being that they are away from their families.

1. Extent to which it is necessary to change the administrative model of the current educational system
To a large extent, 42.6% of the teachers believe that it is necessary to change the administrative model of the
educational system that is being followed today. 39.9% of the teachers responded that this change is
moderately necessary. Only 6.1% of the respondents answered 'very much', while only 4.1% answered 'not at
all'.

2. Extent to which it is necessary to change the administration's manner in the school unit the
respondents serve
On average, 49.3% of the teachers answered that it is necessary to change the way the school unit they serve is
managed. Only 4.1% of the respondents answered "very much", while 8.8% answered "not at all".

3. The degree to which respondents believe that the problems they face are due to the fact that the
school unit is not located in an urban area
To a large extent, 34.5% of the respondents believe that the problems they face are due to the fact that the school
unit they serve in is not located in an urban area. 25.7% answered 'moderately', 18.2% answered 'very much',
12.2% answered 'little', while only 7.4% answered 'not at all'.

4. Ways to improve the organization, administration and operation of the school unit in which the
respondents serve.
As regards the ways to improve the organization, administration and operation of the school unit in which the
respondents serve, the following were mentioned:
57. Replacing the school unit’s principal and generally improving leadership
58. Change of the administration model. It was pointed out by a teacher that it should change to the direction of Quality Management
59. Seminars for both teachers and principals (on organizational and administrative matters)
60. Holding seminars on the island to avoid the long commute, which is difficult due to the inaccessibility of the area and teachers’ financial problems
61. Participation in programs for visiting schools abroad in order to exchange knowledge and experience
62. Immediate settlement of deficiencies
63. Less bureaucracy
64. Not so frequent change of teachers
65. A considerate and sensitive school principal
66. The school principal should have more responsibilities
67. Existence of a secretary
68. Issues of bureaucracy should be entrusted to administrative officials. For example, a teacher said that secretarial support should be provided by an employee that is not a teacher
69. From the beginning there should be an agreement for a common school policy on issues of teaching and pedagogical discipline, penalties and crises management
70. Interactive tables
71. Better building facilities and logistical equipment
72. Continuous evaluation
73. Introduce incentives to teachers
74. Financial support for the operation of the school unit
75. Interventions in curricula that serve the modern needs of students
76. More careful selection of school principals
77. More self-motivation in school unit management
78. Classes with fewer pupils
79. Increase funds in regional schools
80. Teachers’ association decisions should play a more decisive role
81. Officials should visit remote schools more often in order to provide direct solutions
82. Education executives’ selection should be done based on meritocracy and not on party and union criteria. Executives should be evaluated and they should evaluate teachers properly and everyone should be promoted according to their capabilities
83. Education ministers should not change frequently
84. Redefinition of the education objectives
85. Disengagement of the school from the Pan-Hellenic examinations
86. Changing teachers' attitudes
87. Severe punishments for students
88. Approaching new colleagues in a different way
89. Develop an action plan that will be respected and followed by all members of the school unit
90. Opening the school to the local community
91. Ensuring quality of school life and school events that promote culture
92. Existence and observance of rules that guarantee order, tranquility, dignity
93. More democratic decision-making process.

Additional suggestions from respondents

94. Vocational education must be formulated from scratch and given great weight and value, as it relates to, and should relate to, 60% -70% of the students
95. Physical education teachers should do some theoretical health education lessons as well, perhaps even biology, which will be properly graded, so that on the one hand their role can be upgraded and on the other there will be a theoretical background for the education provided.
96. Administration should show tolerance when teachers want to return to their place of origin, in such times as Christmas and Easter.
97. The central administration and the decisions it make is the main cause of the problems. Constantly unsuccessful experiments are attempted by people who are not related to the subject of education
There is a problem with transport and expensive tickets
It would be good to cooperate with other schools
Before evaluating teachers, there is a need to evaluate books, curricula, the education system and the educational policy.

"Organization and administration are based on the impersonal nature of human relations (service takes precedence over people) and therefore it is almost incapable of behaving differently to individuals. While this has strong advantages in achieving goals, it completely ignores social relationships and the different needs of the personnel."

Some kind of incentive should be provided to motivate teachers stay longer in remote places, and not arbitrarily for two or three years, as is the case now. When teachers are obliged to stay, this has an impact on their performance and behaviour."

"Something I've seen abroad. At every break teacher have to carry around the books and instruments they use for their lesson (math/biology teachers). Why can’t teachers have their own classrooms, and let students run from class to class? In this way, teachers could leave their things, tools, books, in their class. At the end of each teaching hour, they lock the classroom and all the students have to go, until the next teaching hour when another class comes. This will alleviate the stress of teachers who only have a 10 minute 'break'

"Schools should be autonomous, accountable directly to the Ministry. They should be able to set their own educational and pedagogical goals, teaching material and content (cognitive content). They should be able to select books, as well as self-assess and evaluate the work of their teachers. The ministry should take into account the opinion of teachers' associations and not that of any intermediary (trade union). The teachers who teach in the classroom have a right to an opinion and not those who abstain from the classroom or those who are university teachers and have never been in a public school, neither as students nor as teachers."

4. Discussion

The problems reported by the respondents relate to the following categories:

a) inappropriate building facilities and inadequate logistical infrastructure, coupled with the reduced government grant for schools and the financial problems teachers face.

b) inaccessibility of the area (remote location), which has a negative impact on teachers' psychology, leading to inadequate staffing of school units, frequent staff changes, malfunctioning of the school unit, inability to take many initiatives and activities of a learning and extracurricular nature, and consequently to an educational process of low quality.

c) the low intellectual level of the local community, which leads to a lack of interest in the functioning of the school unit, to a poor connection with it, to the indifference of many students to learning and to school deprivation, as well as to the lack of culture in the school units (Heng and Marsh, 2009).

d) non-harmonious coexistence of local and foreign students, resulting in many conflicts between them, manifestations of antisocial behaviour and lack of interest in learning.

At this point it is worth pointing out that the results of the research show that the aforementioned problems faced by the majority of the school units involved in the survey are not, as the teachers argue, due to the fact that the school unit is not located in an urban area but in a remote and inaccessible location and furthermore under bad weather conditions. These problems may be due, according to the respondents' answers, to the inefficient organization of the education system itself and consequently of the school units, namely the bureaucratic and centralized model, which does not give flexibility to the school units and the educational staff in order to take initiatives to enhance the educational process. Given the inefficient and inadequate current model of administrative organization of the education system, the majority of the participants in the survey pointed out the need to change it, through the simplification of procedures and the multitude of laws and regulations in place, the application of a model based on the standards of Total Quality Management, as well as providing more initiatives at both regional and school unit level. In essence, changing the way the education system is administered, and therefore the school unit, was the major factor, mentioned by the majority of teachers, that would help improve the current state of organization, structure and operation of the school units.
Changing the model of administration is expected by teachers to lead to a reduction in bureaucracy, having at school a secretary and thus to the assignment of the bureaucratic issues to administrative staff, to less frequent change of the teaching staff, to greater self-motivation in the administration of the school unit, to interventions in curricula that serve the modern needs of students, as well as to a more democratic decision-making process (Cunningham and Cordeiro, 2006).

In addition, the results of the survey indicate that the selection of education executives, especially school principals, should be based mostly on the meritocratic selection of the most capable employees and they should not be carried out on the basis of political and party criteria, while the evaluation should be carried out by teachers' association (Eurydice, 2004). It was also stated that both the principal and the teaching staff should participate in seminars and training programs concerning the organization and administration of school units. Finally, it should be noted that some teachers emphasized the need to redefine the goals of education, change teachers' attitudes, detach school from the Pan-Hellenic examinations institution, and to achieve better cooperation of the school unit with the local community (Krüger, 2009). All in all, teachers’ views indicate the need to change the bureaucratic and centralized model of organization and administration of the education system, as it is inadequate, ineffective, time-consuming and costly. From the analysis carried out it can be argued that the concept of education is now far from its original purpose, while the role of the school has changed. The problems of secondary schools are numerous, but this, in large part, is not due to the fact that the school units that participated in the survey are situated in remote areas. Therefore, we can claim that the problems faced by the schools of the North Aegean Region are due to the ineffective existing model of organization and operation of the Greek educational system. The results of the survey are summarized in the figure below.

The present study examined the organization and operation of secondary education units in the North Aegean Region. The purpose of the research was to identify the existing model of organization and operation of these units, to record the problems they face, as well as to make suggestions to address these problems and to improve the quality of the educational work provided. The points we should focus on are, on the one hand, the relatively small participation of teachers as regards the questionnaires distributed, and, on the other hand, the results of the research, namely that the problems faced by the schools involved in the survey are not due to their remote and inaccessible location.
Consequently, it is proposed that in the future a similar survey should be conducted nationwide, involving schools from all regions of Greece. Such a study would help to determine whether similar problems exist in other secondary schools in Greece and also to determine whether these problems vary according to the Region and furthermore according to whether the school is located in an urban or non-urban area. In this context, research could be expanded to include primary education schools, in order to determine whether the same problems are observed and whether or not the operation and organization of these school units is different.

As both primary and secondary education is governed by the same centralized and bureaucratic model of organization and operation, they are expected to present the same problems. However, this may be an incentive to carry out further research. In addition, it would be interesting to conduct a comparative study between Greece and other European countries. Such a study would be important to determine the identity of the model of organization and operation of school units in other European countries, the problems they face, and how to solve these problems. The findings from this study could be useful to those who shape the education policy in Greece, in order to draw on the experience and knowledge of other countries in creating a new organizational and administrative model of the educational system, which may be more effective (Ntalossis et al. 2019).

5. Conclusion

The problems reported by the respondents relate to the following categories: a) inappropriate building facilities and inadequate logistical infrastructure, coupled with the reduced government grant for schools and the financial problems teachers face, b) inaccessibility of the area (remote location), which has a negative impact on teachers’ psychology, leading to inadequate staffing of school units, frequent staff changes, malfunctioning of the school unit, inability to take many initiatives and activities of a learning and extracurricular nature, and consequently to an educational process of low quality, c) the low intellectual level of the local community, which leads to a lack of interest in the functioning of the school unit, to a deficient connection with it, to the indifference of many students to learning and to school deprivation, as well as to the lack of culture in the school units and d) to non-harmonious coexistence of local and foreign students, resulting in many conflicts between them, antisocial behaviour manifestation, lack of interest in learning. These problems may be due, according to the respondents’ answers, to the ineffective system of organization of the education system itself and consequently of the school units, namely the bureaucratic and centralized model, which does not give flexibility to the school units and the educational staff in order to take initiatives to enhance the educational process. Given today's ineffective and inadequate model of administrative organization of the education system, the majority of the participants in the survey pointed out the need to change it, through the simplification of procedures and the multitude of laws and regulations in place, the application of a model based on the standards of Total Quality Management, as well as providing more initiatives at both regional and school unit level. In essence, changing the way the education system is administered, and therefore the school unit, was the major factor mentioned by the majority of teachers to help improve the current state of organization, structure and operation of the school units. Changing the model of administration is expected by teachers to lead to a reduction in bureaucracy, having at school a secretary and thus, to the assignment of the bureaucratic issues to administrative staff, to less frequent changes of the teaching staff, to greater self-motivation in the administration of the school unit, to interventions in curricula that serve the modern needs of students, as well as to a more democratic decision-making process. In addition, the results of the survey indicate that the selection of education executives, especially school principals, should be based mostly on the meritocratic selection of the most capable employees and not be carried out on the basis of party criteria, while the evaluation should be carried out by teachers’ association (Eurydice, 2004). It was also stated that both the principal and the teaching staff should participate in seminars and training programs on the subject of the organization and administration of school units. Finally, it should be noted that some teachers emphasized the need to redefine the goals of education, change teachers' attitudes, detach school from the institution of the Pan-Hellenic examinations, and to achieve better cooperation of the school unit with the local community (Krüger, 2009).

All in all, teachers' views indicate the need to change the bureaucratic and centralized model of organization and administration of the education system, as it is inadequate, inefficient, time-consuming and costly. From the analysis carried out it can be argued that the concept of education is now far from its original purpose, while the role of the school has changed. The problems of secondary schools are numerous, but this, in large part, is not due to the fact that the school units that participated in the survey are situated in remote areas. Therefore, we can claim that the problems faced by the schools of the North Aegean Region are due to the ineffective existing model of organization and operation of the Greek educational system (Ntalossis et al. 2019).
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