

Innovative actions in Education - Management model and actions of encouragement and support in Secondary Education

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Summary

The effective management of innovative programs and the development of the capacity to design and implement innovations are challenges that an educational organization is called upon to undertake. This paper focuses on leaders' actions to encourage the organization and implementation of innovations in a school. In the present work, in a sample of 116 principals of secondary schools of the Region of Western Greece, an attempt is made to investigate issues related to the necessity introducing innovative actions in the school organization they serve, the suitability of specific models of leadership behavior style for school innovations and actions necessary to encourage and support the implementation of innovations in schools. The research highlighted the need for innovative actions with an important factor being the existence of a positive communication climate through a democratic leadership style. The success of innovation is never guaranteed and depends on the intelligence and clarity of the person who directs the innovation, making the role of the school principal crucial.

Keywords: Innovation in education, encouragement - support of innovation.

Introduction

Enhancing critical thinking, cultivating the student's creative and synthetic capacity, developing social skills and positive attitudes towards all kinds of values are, amongst others, key goals for the education of the future. As described by UNESCO, 21st century education is based on the 4 pillars: 1. I learn how to learn, 2. I learn how to act, 3. I learn how to exist, 4. I learn how to live with others (UNESCO, 1997; Delors, 1999).

Educational innovation is one of the modern expressions of educational change that is mainly associated with the educational unit and focuses on the teacher of practice (Dakopoulou, 2008:199).

According to Bouzakis (1995), modern social demands place the school-society relationship in a different climate, since the school is now called on to be a carrier and catalyst for socio-economic change and not just to adapt to them. Of course, taking into account the rapid socio-economic changes of the modern world, a dynamic educational system is needed that can, at least, meet the challenges these pose, if it cannot anticipate the transformations of society (Hatzipanagiotou, 2001:19).

Regarding the exercise of leadership, Koutouzis (1999) mentions the need for capable executives who combine both the knowledge of the Manager as a leader and the Educator as an innovative officer. The development of a climate of creativity, initiative and innovation in the reality of an educational organization that aspires to develop, upgrade and modernize educational units must be shaped through understanding at the school (Mavrogiorgos, 2008:121).

Everard and Morris (1999) state that the desire of innovators to improve an existing situation must take into account the value system in which they innovate.

Education systems often make changes to respond to changing environmental conditions. However, change is a process with organizational and managerial parameters, which is implemented by people. People are the driving force of change, while its success depends on what people think, aim at and do (Evans, 2001).

In education, the terms innovation, change, modernity, modernization and reform are often confused. The terms "innovation" and "change" are often used interchangeably, but in essence, the term "change", also encompasses the term "innovation" (Mavroskoufis, 2002).

Educational reform focuses, conceptually, on all the measures that refer both to the readjustments of the external organization of an educational system as well as to the reorientations in the spirit and form of the educational procedure, in the context of classroom interactions (Dakopoulou, 2008:168-169). The term "change" means the transition from one state to another, replacement, conversion, change, alteration, etc., while the term "innovation" means the opening of new avenues, the introduction of new methods or ways energy change, radical change, substantial modification and reform. The difference between innovation and change is that all innovations imply changes, while not every change necessarily implies an innovation (Mavroskoufis, 2002).

According to Everard and Morris (1996), the term "change" is used in a sense that includes "innovation" and development. According to Burke (2002), designing change is defined in terms of content and process. Key models that promote change are those described by Lewin, with three stages (thawing - change - re-freezing), Kotter (consolidation - introduction of new practices - integration), and those that identify change with the overall development of the organization or that have been adapted to the educational landscape (Kotter, 2001; Burandas, 2001).

Change is treated as part of the development of the organization, proposing two types of basic approaches: the humanitarian - procedural approach, with a focus on people and emphasis on communication and decision-making and the techno-structural (rational) approach, with a focus on technology and an emphasis on structures (Chytiris, 2006). Such approaches are action research, the three stages of Fullan (1991) (introduction - implementation - stabilization) and the six-stage approach (diagnosis, specification of the future, the present and the differences between them, transition management and evaluation) by Everard and Morris (1999).

According to the OECD (Frascati Manual 2015) the term innovation refers to the transformation of an idea into a marketable product or service, to the business method of production or distribution, new or improved, or even to a new method of providing a social service.

Inbar (1996), divides the process of implementing innovations into five phases (understanding, vision, expectations, empowerment and support), which could be characterized as the internal structure of the classical distinction of phases of innovation implementation (design, research and development or start-up, development, implementation of institutionalization).

According to Rekleitis (2002), a definition which is composed of many others and is presented as more complete defines innovation "as an unusual, important and discontinuous organizational change that includes a new idea, which does not agree with the existing general idea of its operation." Organization implies organizational intelligence, because it is followed by changes in current organizational skills, cognitive patterns, conceptual models and applied theories. According to Rekleitis and Trivella (2000), in terms of conceiving ideas, an innovation should come from the members of an organization, be of a pioneering character in its implementation and depend on the number of new ideas. Educational innovation is "the actions that contain and promote new concepts for education in three dimensions: the use of new teaching tools, the implementation of new teaching approaches and the change of principles and beliefs" (Fullan, 1991). Particularly effective factors for the implementation of an innovation are the involvement of the teacher in the whole process and the creation of common goals and values, especially when they propose new daily practices and new pedagogical concepts (Fullan, 1991).

Dakopoulou (2008:172), refers to educational innovation as the essential and radical modification of the educational system, which presupposes at least one action, intervention, plan or activity that can be piloted and includes educational transformations - changes, which the institutional framework did not provide. Regarding the Principal and the teachers, who are the main actors in the process of Educational Change Management at the level of educational organization, they aim at initiatives and assume the roles of facilitator and innovator respectively (Dakopoulou, 2008:177, 197-198).

A key feature of an innovative curriculum is expediency (intention to change) and systematic intervention (utilization of new ideas and methods for curriculum change, teaching methodology, pedagogical relationships, school organization and administration). Moreover, the following have a role in planning: a) government educational policy, b) the scientific community, and c) the participating teachers (Pasias, 2002).

The necessity of implementing an innovation is what connects it with the essential character of education, but the clarity of an innovation makes its implementation easy and fast, , if the latter is possible (Pamouktsoglou, 2005, p. 113).

For the implementation of an innovative action, the educational organization should not depend on the Ministry of Education, but should have some degree of autonomy. This autonomy should be accompanied by the cooperation and active participation of as many individuals and groups as possible. It therefore becomes necessary for a participatory management model to exist, where there will be interaction between teachers, parents and students and cooperation will be encouraged (Giannakaki, 2002:120-121).

Teachers need to be trained properly in both theory and practice, as well as to practice using the media - materials related to the innovation (Ryan and Joong, 2005). Moreover, the relationships between them must be harmonious, as they are an important factor of success. The collective strength that develops through the sharing of common working conditions, trust and mutual support is able to face and find solutions to the problems which arise throughout the implementation of an innovative action (Masourou, 2012; Sergiovanni, 2001:117-118).

The success of an educational innovation depends on many factors. It is no coincidence that many educational innovations have failed in the past. Regardless of the source that promotes or enforces the innovation, there are certain inhibitory factors. These may include the different perspectives of the stakeholders (threat to the safety and well-being of some) and fear of the unknown and invested "interests" that result in resistance to change (Raptis, 2006; Everard et al, 2004).

The school is an open system, so part of the changes also affects the external environment (eg increase of foreign language tuition centers with the introduction of a second and third foreign language). In school, the introduction of change is inevitable and a key role in implementation is played by school leadership (Beckhard and Harris, 1987; Pasiardis, 2004).

The process of change frequently encounters obstacles. The driver of change has to face vested interests, prejudices, negative attitudes, unpleasant feelings, conflicts and structural inertia (Hannan and Freeman, 1984).

Theoretical framework of the research

In the case of educational organizations, a key role in the implementation of innovations is played by school leadership. In the first stage the principal himself or herself must be the owner of the concept of change, in order to be able to transmit this general concept to those who will be involved in the process of change, in this case, to the teachers' association and to the parents. Every educational leadership should have some necessary knowledge and skills to manage change, as well as some necessary personality traits (Raptis, 2006).

According to Everard, Morris and Wilson (2004), the necessary knowledge and skills consist of knowledge regarding human incentive systems, reward schemes and the internal and external environment of the organization.

Of course, the organizational conditions play a crucial role in the positive outcome of change, such as, indicatively, the quality of leadership, a purpose with clear goals (schools without clear goals are inefficient), the structure - organization (the structure is by requirements), the process (decisions are made at a level where the necessary information is available), human resources, realism (situations are treated as they are and improvements are designed based on the vital and reliable information received from feedback mechanisms, the environment (school - open system integrated in a complex environment), balance (the balancing of interdependent factors), the peer climate (a common peer professional culture) (Everard et al, 2004).

As the creation of disputes, clashes and conflicts arising from uncertainty about the new situation is often inevitable, the role of the principal is rendered particularly crucial and important, regardless of the management model that is applied, and his contribution to the implementation of innovations increases in proportion to the degree of autonomy of the school, but also to his or her ability to address the concerns of teachers (Papakonstantinou, 2008).

The role of the principal becomes decisive in decentralized education systems, where there is a great deal of autonomy, while when innovations are proposed from the top of the hierarchy, mainly through a program, then unit autonomy is limited to managing that program at the school level. This fact mainly concerns the principal and the teachers almost not all (Papakonstantinou, 2008).

Depending on the case, the principal is called to play a dual role, on the one hand, to recognize and promote the development of innovative ideas of school teachers and, on the other hand, to be the guarantor of the implementation of innovation by managing the reactions that may arise. Critical elements for managing school innovations which can affect the principal's effectiveness as a leader, are: the leader-member relationship, the structure of tasks, and the strength of the leader position, as well as the internal and external environment of the school organization (Michopoulos, 2004).

Purpose and research questions

The main purpose of the research was to identify and explore the views of the school principals in Secondary Education in the Region of Western Greece, in relation to the introduction, encouragement and support of innovations within education.

The specific objectives of this research were the recording of:

1. The level of studies, knowledge and skills from training in relation to innovations and changes, of the principals of secondary schools in the Region of Western Greece.
2. The principals' opinions about their teachers' attitudes toward innovation.
3. The principals' opinions on the necessity and the climate regarding the introduction innovative actions in the school where they serve.
4. The principals' opinions on the suitability of specific models and leadership behavior styles in order to encourage the implementation of innovations in schools.
5. The views of the principals on the actions of encouragement and support for the implementation of innovations in school units.
6. The level of knowledge and skills of principals to encourage innovation in schools.

The research questions of the present research attempted to investigate the views of secondary school principals in the Region of Western Greece (Prefectures of Achaia - Ilia - Etoloakarnania) concerning the introduction, encouragement and support of innovations.

In particular, in relation to demographic factors, issues which were investigated concerned the following:

1. The necessity of and the appropriate climate for the introduction of innovative actions in the school unit where they serve,
2. The suitability of specific models and leadership behavior styles to encourage innovation in school units.

3. Encouragement and support for the implementation of innovations in school units.

The research questions related to the objectives were as follows:

1. Is there a need as well as the appropriate climate in the opinion of the principals (in Secondary Education of the Region of Western Greece) for the introduction of innovative actions in the schools where they serve?

1. Is there a need, as well as the appropriate climate, according to the principals, for the introduction of innovative actions in the school they serve?

2. Which is regarded by the principals as the most appropriate model - leadership style to encourage the implementation of innovations at schools?

3. What actions of encouragement and support are considered by the principals to be the most appropriate ones for the implementation of innovations in school organizations?

Methodology

The research methodology which was followed was quantitative using descriptive statistics. The research, as mentioned above, aimed to investigate the views of the school principals in Secondary Education in the Region of Western Greece, with regard to the introduction, encouragement and support of innovations.

As far as the purpose and the individual objectives of the research are concerned, the research can be characterized as descriptive. An overview of data collection was performed over a specific period of time, describing the nature of the existing conditions (Cohen & Manion, 1994).

Sample

The population of the research was the principals of secondary school in the Region of Western Greece. The sample consisted of 116 principals, while the time period for conducting the survey was the period 6th-30th June 2021.

Means of data collection - Procedure

The quantitative approach was chosen for this research, as the aim was to conduct a systematic study of the empirical reality based on data collected directly by the principals themselves following an investigative - descriptive statistical study, which is appropriate for such research issues (Paraskevopoulos, 1993:132).

The quantitative approach has the advantage of being able to select the appropriate sample and generalize the conclusions. In addition, the research data can lead to statistical analyses (Bird, Hammersley, Gomm and Woods, 1999:337).

The quantitative approach was chosen for the research using a questionnaire as a data collection tool. Questionnaire research is a means of detection, which is suitable for studies that are easily measurable and comparable over time (Bell, 2001; Kyriazi, 1999).

The completion of the anonymous questionnaire was considered to be the best option for the implementation of the research. The duration of this procedure lasted approximately ten minutes, giving plenty of time for all the questions to be answered.

Where deemed necessary, the use of the five-digit number of determinants (Likert scale) was adopted to evaluate a concept, thus minimizing the effects and enhancing the validity and reliability of the research (Vergidis, 1998-99:270-275).

The data collection tool used was an appropriately configured anonymous questionnaire, which was given to the school principals for electronic completion. The questionnaire contained mostly closed-ended questions (multiple choice questions, less rated questions based on the five-point Likert scale ranging from 1 - not at all to 5 - too much). There were no open-ended questions (clarifications - suggestions), as they are difficult to codify and process.

The SPSS was used and the contingency tables were analyzed using the χ^2 method. A correlation test was performed in relation to the gender, age and school of the principals, their

years of management, their additional studies and the number of training programs they have attended regarding innovation and change.

A credibility check was also carried out for the module - question groups encouraging (5 questions) and supporting (4 questions) innovative actions. The Cronbach coefficient values were 0.798 and 0.748 respectively, indicating an acceptable level of reliability.

Results - analysis and processing of research data

Demographics

The secondary school principals of the Region of Western Greece who participated in the research consisted of 76 (65.5%) men and 40 (34.5%) women. The age distribution showed that the majority of principals 80 (69.00%) are in the age group 51-60 years, while 15 (12.90%) are in the age group 36-50 years and 21 (18.10%) is in the age group of 61 years and over.

The types of schools of the principals who participated in the research consisted of 61 (52.60% Junior High Schools, 37 (31.90%) General High Schools, 15 (12.90%) Vocational High Schools, 1 (0.90%) Evening General High School and 2 (1.70%) Evening Vocational High Schools. The years of service in a managerial position of the teachers who participated in the research consist of a) 52 (44.80%) for 1-4 years, b) 49 (42.20%) for 5-8 years and c) 15 (12.90%) for 8 or more years.

Regarding the possession of degrees other than the basic degree, the principals who participated in the research have a) 12 (10.30%) a second degree, b) 84 (72.40%) a postgraduate degree related to Education - Administration, c) 35 (30.20%) a postgraduate degree not related to Education - Administration, d) 1 (0.90%) a doctorate related to Education - Administration and e) 7 (6.00%) a doctorate not related to Education - Administration. School principals who do not hold a degree other than the basic degree number 7 (6.00%).

Regarding the attendance of training programs in relation to innovation and change in education, the number of principals who participated in the research have attended 1-2 seminars was 32 (27.60%), 3-5 seminars 36 (31.00%), 6 or more seminars 47 (40.50%), while 1 (0.90%) has not attended any seminars.

Of the principals who participated in the research 103 (88.80%) have a certified knowledge of a foreign language. Moreover, the number of principals who participated in the research and who have a certified knowledge of new technologies with relevant certification according to the requirements of the Supreme Personnel Selection Council (SPSC) is 111 (95.70%). In terms of certified knowledge of digital technology levels A and B, - 70 (60.30%) of the principals who participated in the research were at A level and 45 (38.80%) at B level, while 1 (0.90%) did not have any certified knowledge of digital technology at these levels.

Principals' view of their school's attitude towards innovation

Of the principals who participated in the research 38 (32.70%) consider the disposition of the teachers of their school unit regarding research and experimentation around issues of daily practice (pedagogical, administrative, ways of cooperation, etc.) to be 'Much' or 'Very Much', and only 9 (7.80%) 'Minimal' or 'Not at all'.

Furthermore, of the principals who participated in the research 24 (20.70%) consider that there is 'Much' or 'Very Much' development of innovative actions by the teachers of their organization, and only 13 (11.20%) 'Minimal' or 'Not at all'.

Principals' opinion on the necessity and climate of introducing innovative actions in their school organization

Of the principals who participated in the research 100 (86.20%) consider that there is 'Much' or 'Very Much' need for innovation in their schools, and 0 (0.00%) 'Minimally' or 'Not at all' necessary.

49 (42.20%) of the principals consider that there is 'Much' or 'Very Much' existence of a suitable climate for the implementation of innovative actions in their school unit, and only 4 (3.40%) 'Minimally' or 'Not at all' suitable climate.

Principals' view of model suitability - leadership behavior style to encourage innovation in their school organization

Of the principals who participated in the research 112 (96.60%) consider the authoritarian leadership model 'Minimally' or 'Not at all' suitable for encouraging the implementation of innovative actions and 0 (0.00%) 'Very' or 'Extremely' appropriate.

Regarding the empowering leadership model, 38 (32.70%) consider it as 'Minimally' or 'Not at all' appropriate and only 5 (4.30%) 'Very' or 'Extremely' appropriate.

On the other hand, 68 (58.70%) consider the democratic leadership model 'Very' or 'Extremely' appropriate and only 2 (1.70%) 'Minimally' or 'Not at all' suitable for encouraging the implementation of innovative actions.

Principals' view on actions to encourage the implementation of innovations in their school organization

Of the principals who participated in the research 49 (42.30%) consider timing 'Very' or 'Extremely' suitable for encouraging innovative actions and only 11 (9.50%) 'Minimally' or 'Not at all' appropriate.

Regarding motivation, 40 (34.50%) consider it 'Very' or 'Extremely' suitable for encouraging innovative actions and only 13 (11.20%) 'Minimally' or 'Not at all' suitable.

On the contrary, 24 (20.70%) consider the proposal of actions 'Very' or 'Extremely' suitable for encouraging the implementation of innovative actions and 48 (50.30%) 'Minimally' or 'Not at all' appropriate.

Regarding the participation of school principals in actions, 21 (18.10%) consider it 'Very' or 'Extremely' suitable for encouraging innovative actions and 80 (69.00%) 'Minimally' or 'Not at all' suitable.

Finally, regarding good communication climate, 96 (82.70%) consider it 'Very' or 'Extremely' suitable for encouraging innovative actions and 0 (0.00%) 'Minimally' or 'Not at all' suitable.

Principals' view on innovation implementation support actions in the school organization

Of the principals who participated in the research 49 (42.20%) consider the material and technical infrastructure 'Very' or 'Extremely' suitable for supporting innovative actions and only 6 (5.20%) 'Minimally' or 'Not at all' suitable.

Regarding the configuration of the program schedule, 67 (57.70%) consider it 'Very' or 'Extremely' suitable for supporting innovative actions and only 7 (6.00%) 'Minimally' or 'Not at all' suitable.

On the other hand, 25 (21.50%) consider in-school training 'Very' or 'Extremely' suitable for supporting the implementation of innovative actions and 58 (50.00%) 'Minimally' or 'Not at all' suitable.

Regarding the constant informing of the teachers, 44 (37.90%) consider it 'Very' or 'Extremely' suitable for supporting innovative actions and only 5 (4.30%) 'Minimally' or 'Not at all' suitable.

Principals' view of the level of knowledge - skills to encourage and support innovation in their school organization

Of the principals who participated in the research 12 (10.30%) consider the knowledge and skills acquired in their basic and additional university education at a 'Very' or 'Extremely' good level and 49 (42.30%) at a 'Minimally' or 'Not at all' good level.

95 (81.90%) of the principals consider the knowledge and skills acquired in training programs to be at a 'Very' or 'Extremely' good level and only 1 (0.90%) at a 'Minimally' or 'Not at all' good level.

Research questions

1st research question (According to the principals of the Region of Western Greece is there a need and the appropriate action climate for the introduction of innovative actions in the school they serve?)

Regarding the former, it emerged that 100 (86.20%) of the principals believed that there is 'Much' or 'Very Much' necessity for innovation in their school, and 0 (0.00%) 'Minimal' or 'No' necessity.

Regarding the existence of a suitable climate, it turned out that 49 (42.20%) consider that there is a 'Very' or 'Extremely' suitable climate for the implementation of innovative actions in their school, and only 4 (3.40%) 'Minimally' or 'Not at all' suitable climate.

2nd research question (Which is considered by the principals as the most appropriate model - leadership behavior style to encourage the implementation of innovations in schools?)

Regarding the most appropriate model - leadership behavior style:

1. 112 (96.60%) of the principals considered the authoritarian leadership model 'Minimally' or 'Not at all' suitable for encouraging the implementation of innovative actions and 0 (0.00%) 'Very' or 'Extremely' suitable.

2. 38 (32.70%) of the principals considered the empowering leadership model 'Minimally' or 'Not at all' suitable and only 5 (4.30%) 'Very' or 'Extremely' suitable and

3. 68 (58.70%) of the principals considered the democratic leadership model 'Very' or 'Extremely' suitable and only 2 (1.70%) 'Minimally' or 'Not at all' suitable for encouraging the implementation of innovative actions.

3rd research question (What actions of encouragement and support are considered by the principals to be the most appropriate for the implementation of innovations in school units?)

In terms of encouraging actions:

1. *Scheduling*: 49 (42.30%) of the principals considered it 'Very' or 'Extremely' suitable for encouraging innovative actions and only 11 (9.50%) 'Minimally' or 'Not at all' suitable.

2. *Incitement*: 40 (34.50%) of the principals considered it 'Very' or 'Extremely' suitable for encouraging innovative actions and only 13 (11.20%) 'Minimally' or 'Not at all' suitable.

3. *Proposal of actions by the directors*: 24 (20.70%) of the principals considered it 'Very' or 'Extremely' suitable for encouraging the implementation of innovative actions and 48 (50.30%) 'Minimally' or 'Not at all' suitable.

4. *Participation of executives in actions*: 21 (18.10%) of the principals considered it 'Very' or 'Extremely' suitable for encouraging innovative actions and 80 (69.00%) 'Minimally' or 'Not at all' suitable.

5. Good communication climate: 96 (82.70%) of the principals considered it 'Very' or 'Extremely' suitable for encouraging innovative actions and 0 (0.00%) 'Minimally' or 'Not at all' suitable.

In terms of support actions, it emerged for:

1. *Materials*: 49 (42.20%) of the principals considered it 'Very' or 'Extremely' suitable for supporting innovative actions and only 6 (5.20%) 'Minimally' or 'Not at all' suitable.

2. *Configuration of program schedule*: 67 (57.70%) of the principals considered it Very and Very Much suitable for supporting innovative actions and only 7 (6.00%) 'Minimally' or 'Not at all' suitable.

3. *In-school training*: 25 (21.50%) of the principals considered it 'Very' or 'Extremely' suitable for supporting the implementation of innovative actions and 58 (50.00%) 'Minimally' or 'Not at all' suitable.

4. *Constant information of teachers*: 44 (37.90%) of the principals considered it 'Very' or 'Extremely' suitable for supporting innovative actions and only 5 (4.30%) 'Minimally' or 'Not at all' suitable.

Correlations

Regarding the correlation of the variables, an independence test χ^2 was carried out and where it was deemed necessary, a Spearman r_s control between the results of the research questions in relation to gender, age, school of service, years of management, additional studies and the number of training programs the principals have attended on innovation and change.

It turned out that we can claim that there are correlations for:

1. Proposal of actions (grouped variable) as an appropriate incentive action for the implementation of actions with the years of management of the school by the principals ($\chi^2 = 13,328$, $df = 4$, $p = 0.010 < 0.05$).

The Spearman r_s correlation coefficient between the variables of the action proposal (grouped) as an appropriate encouragement action for the implementation of actions and the years of school management by the principals was 0.215 ($N = 116$), so it was statistically significant ($p = 0.021 < 0.05$).

2. In-school training (grouped variable) as an appropriate support action for the implementation of actions with the number of seminars on innovation and changes attended by principals (grouped variable) ($\chi^2 = 13,906$, $df = 4$, $p = 0.008 < 0.05$).

The Spearman r_s correlation coefficient between the variables of in-school training (grouped variable) as an appropriate support action for the implementation of actions with the number of seminars on innovation and changes that principals attend (grouped variable) was not statistically significant.

The large number of cells with expected frequencies less than 5 made various other pairs of variables unusable.

Conclusions - Discussion

The adoption of innovative actions by a school is a procedure that is obviously a relatively slow process.

Introducing an innovation in the education system is essentially an attempt to change the conditions for dealing with problems that have already been created and identified, but it can also be an attempt at renewal that has become necessary, because of either newly created needs or of problems that have arisen from the complexity of the didactic procedure where there is an ambiguity between action - result (Inbar, 1996; Siakoveli, 2011).

The school, as an open system, must constantly introduce innovations that advocate its adaptation to the new demands of the society of which it is a part (Fiske & Ladd, 2000; McGinn & Welsh, 1999).

Innovations are seen as a key feature of effective schools and are, therefore, being promoted in many countries with reforms aimed at decentralizing their education system to the benefit of school autonomy. Innovations that bypass linear teaching and inflexible time management can highlight innovative teachers (Siakovelli, 2011).

The type and form of changes must be selected and implemented according to the degree of centralization of the system to which they are addressed. Under the broad and general definition of educational change, educational innovations and reforms must always aim to improve the organization.

The organization and implementation of innovations by the school are a necessary condition in order to successfully meet social needs, to encourage the academic performance

of students, the development of social skills and the development of higher mental skills (Giannakaki, 2005).

Teachers participating in the production of knowledge must overcome their "isolation" and manage change (Everard et al, 2004 (ed. In Karabelas, Kelly and Fokiali, 2006).

Many innovations are superficially adopted and do not have the potential to differentiate teachers' attitudes and beliefs.

School principals and executives in public education who are involved in innovation are required to *diagnose and identify the factors that are favorable, the levers that they can influence or act on, and the processes they must control* (Papakonstantinou, 2008).

As the success of innovation is never guaranteed, but depends on the intelligence and clarity of the person who directs the innovation, the role of the school principal becomes crucial as long as they advocate the interest of the educational organization by implementing all the tools at their disposal, while maintaining a balance and overcoming obstacles and resistance.

Successful factors are the design, the creation of a democratic climate and a culture of change, continuous professional development, the provision of a flexible structure and sufficient resources, the provision of incentives, the mitigation of problems, the utilization of technology and proposed approaches for its design (Stylianidis , 2008).

Factors that make change difficult are the absence of stakeholders in the decision-making process, the fear of negative judgment from external evaluators, staff instability, resistance to change by students, parents or stakeholders, high implementation costs, lack of resources, distance between researchers and teachers, the pressures for uniformity in assessment, and the requirements for preparation for the next grade / class (Fullan, 1999).

The success of a change presupposes specialized knowledge of the stages of change, of the body of change but also of the forces that resist it (Burke, 2002; Hoy & Miskel, 2008; Pasiardis, 2004; Saitis, 2008).

In terms of their role in change, the principal must motivate, encourage and support innovation, facilitate liaison with local actors, identify opportunities, plan, suggest, collect and transfer information, promote and oversee processes, manage problems caused by change, negotiate with the external environment and allocate the necessary resources.

The principal must, also, realize that the change will be made by the teachers, as he can only provide them with the infrastructure, structure, tools and guidance-coordination. Much of the success of innovations depends on the attitude of teachers and their skepticism and reflection on the change that comes with a high level of training in teaching and pedagogy, which are the best sources for a lasting change in schools (Papakonstantinou, 2008).

Thus, the development of a strategy is part of the task that must be undertaken by the principal and each executive in education in order to convince subordinates that innovation is everyone's responsibility and that it will benefit everyone without marginalizing anyone who does not want, or is not convinced of the goals of, innovation.

As the principal is the guarantor of the implementation of innovations, they must diagnose and identify the factors that are favorable, the levers with which they can influence or act and the procedures that must be controlled so as to reduce the chances of failure of the implementation of innovations. Thus, in the context of the implementation of an innovation in a school organization, the principal and in general the body of any change should follow a strategy which should include the elements of rationality, participation, cooperation, constant communication with the teaching staff, the continuous monitoring and evaluation of the course, climate and needs of the school that leads to the need to introduce innovation (Papakonstantinou, 2008).

The principal is often called upon to implement an innovation that has been designed or imposed by others, which makes their role that of a facilitator and mediator. However, regardless of the origin of the innovation - from the ministry of education or within the school

- they must inform, transmit the theoretical principles regarding the management of innovation, have a two-way and effective communication with the internal environment, manage any conflicts, motivate the staff, organize efficient group meetings and seek in-service training.

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