

Can the Clubs finally 'lift the rock'? Assessing the Sustainability of Reform in Greek Education System

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Abstract. This study focuses on a new institution implemented in the Greek education system. Known as 'clubs', this innovation addresses pupils who have a talent and special interest in a particular subject. The research context is a primary school in Greece, where clubs were run during the last three years. The literature shows, however, that reforms are not easily implemented in established educational contexts and the Greek education system is no exception. The main barriers to reform are school structure and culture. Through a qualitative approach, the study explores whether this innovation can be sustainable in this particular context, by answering three basic research questions: 1) Is there acceptance of the need for the clubs by the members of the education community?, 2) Are the school structures assisting in the implementation of the reform?, 3) Is the existing evaluation procedure adequate to support educators in their efforts to improve the clubs' function in future? The findings show that the reform can be implemented despite the challenges presented by the school context.

Key words: Gifted and Talented Education, Innovation, Evaluation,

Introduction

This study focuses on a reform, a new institution implemented in Greek schools. According to previous research, the implementation of reforms in the Greek education system is not generally successful. Kazamias et al. (2002) compared the effort involved in reforming the Greek education system to the mythical task of Sisyphus, who tried desperately to push a rock to the top of a hill, only to find that it would roll down to the bottom again, requiring him to begin his task again.

The subject of this study, namely the description of perspectives on an innovation and its evaluation, can be related to the possibility of the implementers finally being able to 'lift the rock to the top', in other words to create a sustainable reform. The concept of sustainability reflects the level of implementation needed to ensure the survival of this innovation in a specific educational system, thereby helping to improve its function. The evaluation of sustainability is based on current theories of education management (Foskett & Lumby, 2003; Kelly, 2004; Fullan, 2007; Gilad-Hai & Somech, 2016).

According to current approaches to school management and also to current learning theories, an educational organization is an open system that interacts continuously with the wider complex environment. Any suggestion for improvement that refers to a specific educational context aims to improve the organization's ability to promote useful knowledge. It also aims at the long lasting development of a flexible educational environment, lending it the ability to improve in an ongoing sense (Everard et al, 2004; Holmen & Lyngsnes, 2015).

Any school organization that can respond effectively to suggestions for reform is by definition a flexible and creative learning community. Cooperative relationships that develop between its members, human interactions within its internal structures, the new knowledge constructed, and the experience transmitted within its context, constitute the intellectual capital of this community (Kelly, 2004). Through these processes the school administration can effectively manage reform and use it as an opportunity to promote new values, in other words to innovate (Drucker, 1999). In any learning community, teachers, as the human intellectual capital and as 'moral agents of reform' (Fullan, 2007), should be able to act, through the use of skills, knowledge and experience, on the improvement of the school and the wider learning environment (Everard et al., 2004; Holmen & Lyngsnes, 2015).

It was within this framework that the 'clubs' were planned. The clubs were instituted in Greece's Experimental Primary Schools. These are state schools that differ from mainstream states as they aim to promote research and serve as pilot context for innovative teaching practices. Even though, these characteristics are apparent to every school in Greece, Experimental schools are expected to focus on these more. In fact, teachers who desire to work in experimental schools are evaluated according to their academic criteria, such as studies, research experience, whereas in mainstream schools it is social criteria that matter most such as family status and years of experience.

Additionally, experimental schools are supervised and linked, in terms of function, research and teaching with specific University Departments, mainly of Education Studies. Specifically, all experimental schools are managed by a council, the head of which is an academic from these departments. This council evaluates the implementation of innovative practices, such as the Clubs, which were introduced during the school year 2012-2013, according to Law 3966/2011, with the aim of promoting pupils' particular skills and talents in specific areas of study. The clubs also represent an effort to adjust school functions to the needs and particularities of the local community, by providing educators with the flexibility to choose teaching units, learning materials, and educational approaches. They provide further opportunities for local authorities and organizations to be involved in the work of the school. Selection of subject areas for the clubs, as well as deciding which pupils participate, takes place at school level, as the legislation requires.

The sustainability of the clubs, as well as any new institution in an educational context, is defined and described through the continuous evaluation of the institution (Fullan, 2007). The aim of the current study is to assess this sustainability. Moreover, evaluation of the clubs is required by law; to be effective and accurate, it must examine three main parameters:

- The theories around educational innovation.
- The theories around gifted and talented education children, within the context of a learning organization.
- The research context.

Innovation in Education: Applicability and Sustainability of New Institutions

The Challenge of Reform in Educational Realities

In common with any effort to introduce new institutions and educational perspectives in a school context, reform is a complex phenomenon. Schools adopt a series of aims and goals in order to meet the demands of modern society. Such aims require the adoption of new educational institutions, activities and approaches and their adaptation to the knowledge society (Foskett & Lumby, 2003). A common element is the formation of new teaching models that empathize the importance of cultural context, differentiation, personal choice, interaction, uncertainty, and knowledge construction, based on the principles of authentic pedagogy (Roelofs & Terwel 1999). There is a flow of new learning theories based on cooperative and experiential teaching strategies and the principle of the connection of new knowledge with previous experience (Foskett & Lumby, 2003).

Criticism of traditional practices leads to continuous transformation of the relationships between members of the educational community. The relationship between educators and learners changes. The educator is no longer considered to transmit knowledge but rather to coordinate and assist pupils in their efforts to construct knowledge and develop socially.

The approach of learning as a result of experience, information, and interaction, affects teaching just as it affects any general activity in the educational environment (Roelofs & Terwel, 1999). The perception that knowledge is constructed by educators is based on a model of the learning community (Fullan, 2007) within which learners act, teachers support and help, and head-teachers become pedagogical leaders, so that knowledge will be constructed as a product of continuous interaction.

Members of the educational community therefore seek opportunities to improve school functions. Reform is the sum of all the planned actions through which these desired improvements are achieved. Reform can be considered a chaotic phenomenon, with unpredictable results in educational structures. However, any proposed reform goes through four different stages: a) initiation, which includes the decision to reform, b) implementation, which includes application in the reality of the school, c) the institutionalization of the reform and its

establishment as a significant part of the educational system, and d) the evaluation of its results. The sustainability of reform depends on its capacity to improve the quality of the education. Through the prism of the current theoretical approach, this is analyzed in relation to its limitations and especially in regard to its impact on the learning environment, its impact on the roles of agents, and finally its impact on learning outcomes (Fullan 2007; Holmen & Lyngsnes, 2015; Gilad-Hai & Somech, 2016).

Gradual Transformation in the Educational Environment

The impact of reform in the educational environment depends on the extent of the reform, itself an intriguing field of research. On the one hand, large-scale reforms, known as systemic reforms, aim to improve educational institutions and hence their function (O' Day & Smith, 1991). Systemic reform is based on the assumption that knowledge gained at school has long-lasting effects, from which the whole community expects multiple benefits (Foskett & Lumby, 2003). Systemic reform relates school knowledge to social and cultural development and to the experience, skills and attitudes of individuals.

On the other hand, smaller-scale more limited reform is also possible. In this case the aim is not necessarily significantly socio-economic and there is no suggestion of radical reform of the system and its structures. The value of such reform rests firstly on the fact that it promises to improve relatively easily minor deficiencies in the educational system, and secondly on the fact that it might serve as a stimulus for greater reform later on.

Both paradigms of education reform have been observed in practice. Because the effectiveness of a reform is identified through its impact on the educator and the wider social environment, its extent remains a subject of considerable debate (Foskett & Lumby, 2003; Fullan, 2007).

Teachers as Change Agents

Teachers have an important role to play in educational change. They are in particular central to any reform that emphasizes the improvement and enrichment of a school's functioning and hence the educating role of the school. Ideally, they should share the vision inspiring the reform and therefore understand its necessity. Implementation of innovation in the everyday reality of a school is more effective in a flexible learning environment where educators can have training and opportunities to enhance their technical knowledge (Fullan, 2007; Conway & Andrews, 2016).

By participating in knowledge production, educators have the opportunity to influence reform and related decision-making. By taking advantage of all the opportunities that the environment offers them, they should be able to find information and coaching on teaching interventions. This should allow them to work through the challenges that accompany the implementation of reform such as limited time, equipment, financial support and training, so that they can implement the reform successfully (Everard et al, 2004; Gilad-Hai & Somech, 2016).

Teachers can also draw on their experience and share knowledge about the reform with other members of the educational community. In such a way they can assist in initiatives that improve school climate. The improvement of school management and the learning environment is a complex process that demands continuous interactions, not only between educators, but also between members of the broader educational community that take part in decision-making including defining the principles behind planned reforms. Since educators know perhaps better than anyone the reality of the school and classroom, they have not only the right but also the obligation to cooperate in processes of curriculum reform and related decision-making (Taba, 1962; Foskett & Lumby, 2003; Fullan, 2007).

All these processes, training opportunities, and exchanges of ideas and experiences to inform the planning of reforms, connect to the flow of information and constitute the communication that develops within a learning community (Kelly, 2004; Fullan, 2007; Earl & Timperley, 2015; Holmen & Lyngsnes, 2015).

Evaluation of Structure and Process

According to Fullan (2007), applications of an educational reform, no matter what the type, extent or the education system in which they are applied, should have a deep impact on the educational system including at the classroom level and on the educational culture if the reform is to be systemic and sustainable. Similarly, Hargreaves and Fink (2000) agree that a systemic reform should include the following three dimensions:

1. It needs to have depth, which means it should change ideas and perceptions about the role of the schools at a fundamental level, or be compatible with existing deeply held views.
2. It needs to have width, which means it needs to influence all the structures of school organization, or be compatible with existing structures.
3. Finally, it needs to have length, which implies an aspiration to long-lasting goals and aims.

The foregoing conceptual framework makes the evaluation of educational reform a necessary task in order to draw conclusions about its effectiveness and to generalize about the need for such reform (Earl & Timperley, 2015; Gilad-Hai & Somech, 2016). Evaluation is, however, important for the educator as it is not only a form of assessment but also an opportunity to present his or her experience about the implementation of new structures and processes in education and thus influence future action (Fullan, 2007). Although self-evaluation is often preferred it should be borne in mind that basic criteria affecting the evaluation design are the initial goal and the legal context of the innovation. Alongside these are also the criteria of the education outcome, learners' attendance rates, learning tasks and teaching and learning strategies.

Education of Gifted and Talented Children within an Existing Mainstream Educational Organization

Research on the education of gifted and talented children has a history dating back more than 100 years. Many theories have been proposed regarding the appropriate way to teach children that demonstrate talents or gifts in particular subjects. However, there is limited knowledge about the applicability of these theories (Ziegler et al, 2012).

First it is important to define giftedness. According to Subotnik et al. (2011, pp.7):

“Giftedness is the manifestation of performance or production that is clearly at the upper end of the distribution in a talent domain even relative to that of other high-functioning individuals in that domain. Further, giftedness can be viewed as developmental, in that in the beginning stages, potential is the key variable; in later stages, achievement is the measure of giftedness; and in fully developed talents, eminence is the basis on which this label is granted. Psychosocial variables play an essential role in the manifestation of giftedness at every developmental stage. Both cognitive and psychosocial variables are malleable and need to be deliberately cultivated.”

The uniqueness of this approach to giftedness lies in the emphasis placed on psychological and social factors, which have enjoyed less importance in other definitions.

In addition to this approach, the American Union of Research on Gifted Children states that such children can have skill in a variety of domains, such as intellectual ability, artistic ability, leadership skills, creativity, and inventiveness in certain scientific-cognitive areas (National Association for Gifted Children, 2008).

The point of agreement among all the groups that have tried to define giftedness is that it defines and is defined through three basic characteristics. These are

- General knowledge and skills higher than average.
- Creativity, and
- Ability to execute complex tasks effectively.

Rinn (2012), bearing the above in mind, identifies three main questions. The first has to do with the dimensions of giftedness that are linked with teaching of gifted and talented children. The second has to do with the possibility of quantifying these, and the third is connected with the suggested relevant teaching interventions.

With regard to the first question, the main parameters suggested are motivation, persistence, effort, and intention for deeper study, general interest, social relationships, intention to experiment, and the ability to overcome complex challenges. All these parameters, according to Rinn (2012), should be evaluated in relation to academic ability.

There is no clearly generalizable answer to the second question, which regards the ability to quantify these parameters. It is likely to depend on each case and its particular characteristics.

Lastly, with regard to the third question on the most appropriate teaching interventions, there is general agreement that teaching talented children is achieved in three phases. The first includes identification of the talents and interests of learners by teachers. The second phase includes the promotion and development of relevant knowledge and skills. The third phase includes the motivation of the learners to develop their own approach, theory, and method in the field in which they are talented. The school also needs to be in continuous cooperation with parents or any other group or organization that specializes in different fields and can assist with the learning (Kelly, 2004; Rinn, 2012).

The Research Context

Clubs as an Innovation in Greek Elementary Education

In a model experimental primary school in Greece there are clubs running in various fields. Some can be linked to science, such as the Maths Club, the Science Club, the Geography Club, the Environmental Club and the ICT (information and communications technology) Club. Others can be linked to arts such as the Reading Club, the Arts Club, the Local History Club, the English Club and the Cinema Club. There is also a Dance Club and a Volleyball Club.

The establishment of the Clubs began in accordance with the relevant law, after the teachers' board had agreed to it at the end of the academic year 2011-2012. The initial plan included details about the subjects of the clubs, the timetables, the educators involved, the syllabus and the learning activities.

This initial plan was approved, as required, by the Central Council of Model Experimental Schools of Greece, which is based in Athens. The approval was followed by a dissemination of information about the clubs to parents and learners through the school's website and during parents' evenings. At the same time, the innovation was promoted through the local authorities so that parents and learners from other schools who might also be interested would be informed and able to apply and participate in Clubs of their interest. As soon as applications from learners to join the clubs had been submitted these were reviewed and learners were selected for the clubs.

Pupil selection, as suggested in the literature (Cropley, 1993; Subotnik et al, 1996; Rin, 2012) and required by the law 3966/2011, was based on mostly testing. The test included questions based on pupils' knowledge, skills and general ideas. All these were linked to the topics that the Club would emphasize on. Parents also cooperated, as they expressed their opinions about which club could be suitable for their children and they filled in the forms for their children's participation. The same law states that each pupil can participate in a maximum of two clubs. During the first year, 76 pupils participated in at least one club. During the

second year, when more clubs were run, 89 pupils participated. During the third year, 78 pupils took part. Finally, during the fourth year, 92 pupils attended clubs. Overall, 212 pupils were members of a club (many pupils participated in clubs for more than one year).

It was a legal requirement that the teachers in charge of the clubs submitted an evaluation report at the end of the first and second semester. These reports normally contained an assessment of the clubs, the lesson plans, data from all the activities that took place, or even interviews with parents and pupils based on their impressions of the clubs.

Processes of Educational Change in Greece: The Myth of Sisyphus

The myth of Sisyphus comes from Greek mythology. As Homer describes, Sisyphus, was a wise and prudent king who was condemned to roll a heavy rock to the top of a hill ceaselessly for having stolen the secrets of the gods. When reaching the top of the hill, the rock would roll down and Sisyphus would have to start pushing it up again. The tragic element of this myth is that its hero is a conscious human, exerting much effort but accomplishing nothing.

According to Andreas Kazamias et al (2002), a challenge similar to the punishment of Sisyphus, is apparent in every attempt for educational reform in Greece, as all such attempts end up being long, unsuccessful and incomplete. Even though there is a recognized need for change, the Greek educational system, has a way of returning to the past, again and again. This metaphor has a political dimension, which addresses to the bureaucratic and centralized nature of the Greek state. It also has a cultural dimension which addresses to a school's autonomy, and the socio-economic dimension. Over the years several forces for change have arisen in Greek society. Examples of such are globalization, advances in information and communications technology, research findings, new learning paradigms, and the influence of the European Community. The need for innovation is recognized, but the education system resists change.

Most European Educational systems provide a variety of paths offering progress from one level of education to the next. In the Greek educational system, however, this process generally follows a vertical 'one-way' process, where each educational level serves as a preparatory stage for the next. Educational achievements are highly desired by the Greek family. Parents tend to motivate children to achieve the highest possible education level.

Reforms focusing on modern learning approaches and pedagogies do not seem to be of much interest unless they are associated with the intensive preparation of learners to face a highly competitive environment at the secondary level. No matter how useful the reform might be, it is expected to fail if the system orientation remains exam-centred, centrally designed, and based on traditional ways of transferring rather than constructing knowledge (Kazamias et al, 2002).

This resistance to change is likely to emerge in the case of the Clubs as well. The reform of the Clubs aims to provide and institutionalize opportunities for gifted

and talented pupils to develop their talents. It does not expand to change aspects of the Greek Education system, such as the competitive exam-designed and exam-oriented culture of the school. Moreover, it does not provide any means or equipment for schools. Additionally, there seems to be no change concerning the legal conditions under which the teachers work (Law 3966/2011). The reform of the clubs is expected to be implemented within the existing context of schools in Greece. Bearing these factors in mind, it is uncertain whether the clubs for gifted and talented children can in fact 'lift the rock', in other words achieve sustainability as a reform (Fullan, 2007; Gilad-Hai & Somech, 2016).

Research Methodology

The Research Questions

This particular research study focuses on the sustainability of an innovation. The clubs for gifted and talented children represent an effort to improve the education system. Initially, this seems to be a reform of limited extent in that it could be seen as simply aiming to fill in some 'gaps' in teaching. However, it may represent an initiative with more fundamental significance, as the principle of the clubs, the advancement of gifted and talented learners, is something new to the education system of Greece.

Teachers have a significant role in the case of education reforms (Fullan, 2007; Conway & Andrews, 2016). This is the case in the clubs as well. Teachers need to organize the concept and content of the clubs, which means naming the subject of the Club, arranging a syllabus, selecting the appropriate approach, inviting learners, identifying the ones appropriate, implementing and evaluating the effectiveness (Cropley, 1993; Subotnik et al, 1996; Law 3966/2011; Rin, 2012).

The effectiveness and sustainability of such a reform demands that educators, along with members of the wider community, understand, accept, share and support its mission. It also demands that the structures of the school and the wider education system, its functions and infrastructure, present no obstacles or restrictions either to its initiation or to overcoming any challenges that may emerge during implementation. Finally, it is important that there are opportunities for accurate evaluation of the new institution. This evaluation will assist in locating the strengths of the reform implementation as well as the weaknesses and ways of addressing these (Fullan, 2007; Earl & Timperley, 2015; Holmen & Lyngsnes, 2015).

Bearing in mind the above, in benchmark with the conditions for sustainable reform as described by Hargraves and Fink (2000), the questions that the research has to answer in order to assess the sustainability of the reform are as follows:

- 1) Is there acceptance of the need for the clubs by members of the educational community? (depth)
- 2) Are the school structures assisting in the implementation of the reform? (width)

3) Is the existing evaluation procedure adequate to support educators in their efforts to improve the clubs' in future? (length)

Research Methods

There are a wide variety of approaches to educational research. The selection of the appropriate research approach depends on the context of the research and the research questions to be answered.

The initial stage of the selection is the choice between quantitative and qualitative research approaches. The former approach uses scientific and experimental methods to predict human behaviours and attitudes, along with quantitative measurements to examine the validity of hypotheses (Kerlinger, 1970). On the other hand, qualitative research aims to investigate human attitudes and behaviours within a social context (Patton, 1990).

Strauss and Corbin, (1997) define qualitative research as any kind of research activity that leads to conclusions not drawn from statistical processes or other means of quantification. Those involved in qualitative research aim to illuminate, understand and investigate specific contexts. In contrast those involved in quantitative research aim to generalize in order to be able to make predictions.

This particular study, because of its nature and its research questions, fits more within the qualitative research paradigm; it focuses on analyzing human attitudes in a particular educational and social context. Because there are no specified parameters for defining the effectiveness of a specific educational intervention for gifted and talented learners (Rinn, 2012), the use of quantitative data analysis for the research would have been difficult.

This research involves cooperation, dialogue, and revision as elements of the empirical work (Cohen et al., 2011). Data can be collected through interviews, questionnaires, biographies, notes, and documents of any kind, or by observation (Bell, 2001). For this particular research, the most appropriate data collection methods were semi-structured group interviews with educators and parents and observation.

The use of interview and observation, as data collection methods, gives opportunity to compare data and reinforce the accuracy of the findings. In other words, data from interviews were benchmarked to those of the observation. Benchmarking with documents, such as the Law of the function of Clubs also took place. This approach, known as triangulation, is often suggested and used in qualitative research studies in order to enhance credibility (Cohen et al, 2011).

All teachers who have undertaken the responsibilities of Clubs were interviewed in groups, at the end of each trimester. Therefore a total of 33 group interviews have taken place, among which 21 were interviews of teachers and 12 of parents. Observations were carried out throughout the year. 21 observations of Club sessions or preparation of sessions have taken place.

The interview questions were split into three groups depending on the wider research questions with which they were associated (Cohen et al., 2011). More specifically, there were questions about the impressions and expectations of the clubs, at the beginning, middle and end of the school year. These questions were linked to the first research question. A group of questions was concerned with ideas and opinions about the ways the school could assist in or benefit from the establishment of the clubs. These questions addressed the second research question. Finally, there was a group of questions that concerned the general approach to evaluation and feedback in the clubs. These addressed the third research question.

Data Analysis

In qualitative research data analysis involves organizing, explaining and interpreting the data. Using codes is suggested to assist strongly. Codes are labels attributed to responses, information or data, usually named after the topics or themes that the research questions negotiate, which assist in grouping and managing the data in order to analyse and draw conclusions. The codes are grouped into nodes or categories (Cohen et al, 2011).

Following the model of Hargreaves and Fink (2000), the codes referring to the first research question were grouped under the node 'depth'. Those codes were named 'acceptance', 'necessity' and 'agreement'. Those codes referring to the second research question, were grouped under the node 'width'. Those codes were 'infrastructure', 'equipment', 'school culture' and 'school functions'. Finally, the codes referring to the third research question were grouped under the node 'length'. Those codes were 'assessment practices', 'formal assessment' and 'adequacy'.

All interviews and observation records were transcribed and then analyzed. The responses were coded. As soon as the coding is completed, tabulation of the responses will take place, core categories of them are identified, in order to draw the conclusions, by relating them to the relevant literature (Cohen et al, 2011).

Through this approach, it was intended to explore the possibility that the institution of the clubs is an example of systemic and sustainable reform and innovation, something that could significantly improve the school context and culture (Fullan, 2007; Gilad-Hai & Somech, 2016).

Findings

1st Research Question: "Is There Acceptance of the Need for the Clubs by the Members of the Education Community?"

In relation to the first research question, the acceptance of an institution such as the clubs in the school was apparent. Teachers were positive about promoting the implementation of the clubs. All teachers who took the responsibility for planning and organizing a club explain that others were willing to support the

clubs by assisting in teaching activities or by encouraging learners to participate in them.

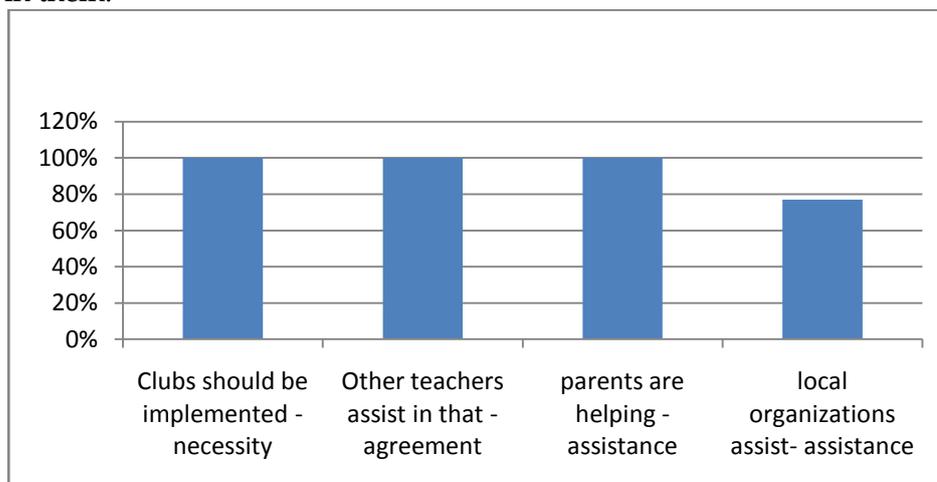


Figure 1: Coded Teachers' responses in interviews for research question 1 (Node "Depth")

Many parents expressed interest in having their children take part in the clubs as soon as they were informed about this innovation. As they explained, they found the clubs interesting for three reasons. Firstly, all of them considered them part of an important effort to enrich the program of the school with innovative actions that corresponded to the interests and talents of various children. Secondly, many of their responses (78%) express the thought that through the clubs the school could gain stronger ties with the local community because there were opportunities for the school to develop its cooperation with the local authorities, enterprises or organizations involved in environmental or cultural topics. Thirdly, in the responses of many parents (67%), there is the consideration that the clubs provide opportunities to promote learning tasks that involved group work aiming not only at promoting cognitive goals but also at the development of other skills and attitudes.

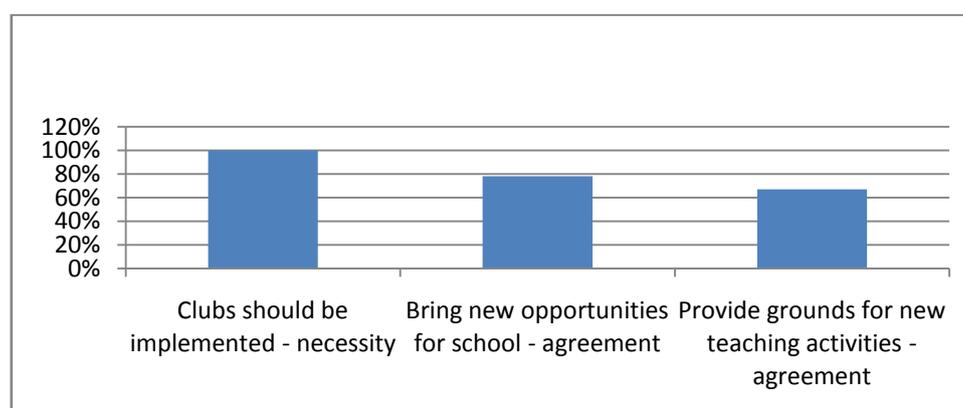


Figure 2: Coded Parents' responses in interviews for research question 1 (Node "Depth")

Local organizations supported the establishment of the clubs as well. As many teachers (77%) explained, and as seen from the observations, they agreed to cooperate with the school in many ways. They provided the school with teaching materials, they sent their members to the school to teach the children about their work, or they accepted educational visits from the children.

These findings reveal that members of the school and wider community appreciated the necessity of an institution such as the clubs at school. At the same time, it was widely recognized that educating talented or gifted learners requires the cooperation of different groups of people as well as the development of knowledge, skills and attitudes. In short, there was agreement about the need for clubs and the way they should be implemented. These are basic conditions for the institution to be systemic and sustainable (Fullan, 2007; Kelly, 2004; Rinn, 2012; Holmen & Lyngsnes, 2015; Conway & Andrews, 2016).

2nd Research Question: "Are the School Structures Assisting in the Implementation of the Reform?"

In relation to the second research question, the findings show that while it is possible for school structures to support innovations such as the clubs, some challenges were also apparent.

Teachers in the interviews (89%) explained that the law suggests (Law 3966/2011), the clubs were planned to respond to the particularities and the special characteristics of the school, the pupils and the local community. This helped greatly in the organization and implementation of the clubs, especially in terms of teaching. Their responses (77%) also show that thanks to this approach, there was no problem gaining access to any means or materials or the rooms required, since planning was based on the materials and accommodation facilities that were already available at school, as well as the general program and operation of the school. Only few teachers expressed challenge facing due to poor school equipment (73%). This shows that there is a level of compatibility between the school structures and the clubs' establishment.

There were, however, also challenges that emerged, mainly of a bureaucratic nature (64%). More specifically, the process of justifying the pedagogic benefits of teaching interventions that included school visits or visits of members of local organizations to the school. Similar responses addressed specifically to legal challenges in using ex-curricular strategies and materials in teaching (55%). For example, using ICT, video-conferencing software or showing a film movie was thought to need to be accompanied by a formal written justification of the need for such an activity, including a reassurance that there would be no unwelcome side effects for the learners.

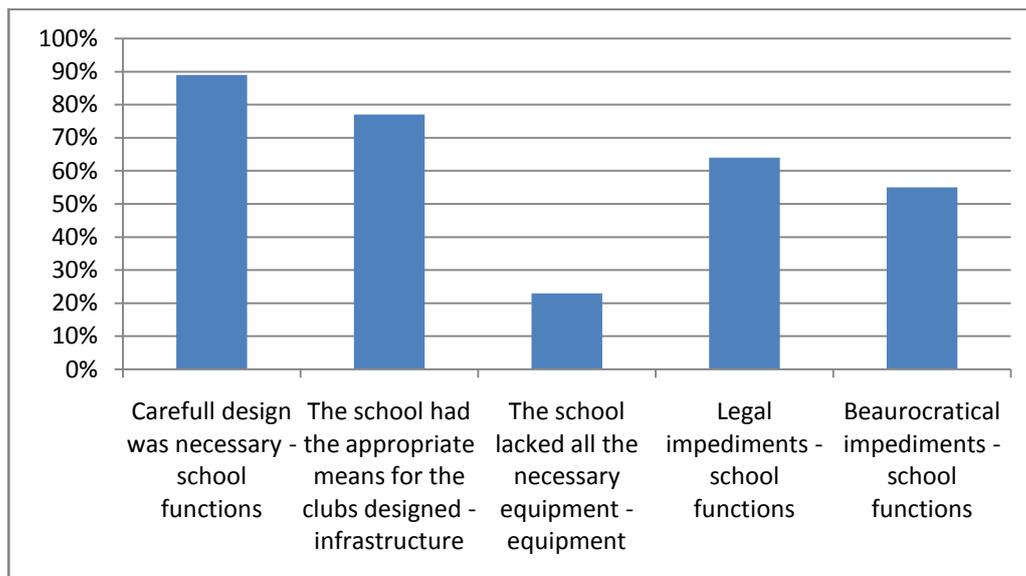


Figure 3: Coded Teachers' responses in interviews for research question 2 (Node "Width")

As can be concluded from the above, the functioning of the clubs, within the specific school context and culture, does not seem to meet any barriers. However, with regard to pedagogic and teaching functions, such as the use of ICT that could enhance the work of the clubs, the present legal context is not sufficiently flexible. This limits the possibilities and options for the teacher in sustaining the straightforward operation of an institution such as the clubs (Kazamias et al; 2002; Foskett & Lumby, 2003; Kelly, 2004; Fullan, 2007; NAGC, 2008; Rin, 2012; Gilad-Hai & Somech, 2016).

3rd Research Question: "Is the Existing Evaluation Procedure Adequate to Support Educators in their Efforts to Improve the Clubs' Function in Future?"

As far as the third research question is concerned, on the efficacy of the evaluation processes and structures to contribute to the sustainability and effectiveness of the institution, the evaluation reports required by law can give a picture of the function of the clubs, according to many teachers' responses (82%). Indeed, evaluating parameters, such as learner attendance rates, the content of the learning tasks, teaching approaches, and achievement of the goals set, provide adequate information about the implementation.

However, there are important aspects of the implementation that are expressed (62%) to be omitted in this kind of evaluation. More specifically, the weakness of this kind of evaluation lies in the fact that it is based only on opinion and judgment from the perspective of the educator and pays no attention to other aspects that can constitute the effectiveness of the clubs, such as the opinions of other people involved, including parents and pupils. As teachers (58%) responded this retrains the accuracy of the evaluation, which ends being less broad. The current evaluation context does not assist in the triangulation of

information, which would give a clearer picture of the progress of the clubs (Fullan, 2007; Cohen et al., 2011).

Teachers added that the law certainly provides the school with the necessary flexibility to help in taking the initiative to organize school-based evaluation techniques. Examples of this are the meetings with parents and discussion through research groups that give information and ideas on improvement and feedback, which would help educators to organize tasks more effectively and to revise the goals of the clubs. This solution, however, meets two challenges. The first is linked to the fact that the particular field of study, the education of gifted and talented children, has no specific parameters for giving generally accepted measurements to evaluate teaching interventions (NAGC, 2008; Subotnik et al, 2011; Rin, 2012). The second is linked to the fact that the arrangement of such meetings is not supported directly by law. Even though the law does not prohibit these meetings, there is concern (72%) that holding such meetings might give the opportunity for reaction and complaint.

In short, the evaluation of the progress of the clubs is forced to adapt to the existing context which addresses to evaluations of schools and education institutions, no matter if they undergo reform. The lack of elements to justify the validity and accuracy of the existing methods, in combination with their limited flexibility to promote new institutions, limits the expectation of their effective implementation, which would help them to be systemic and sustainable as reforms (Fullan, 2007; Gilad-Hai & Somech, 2016).

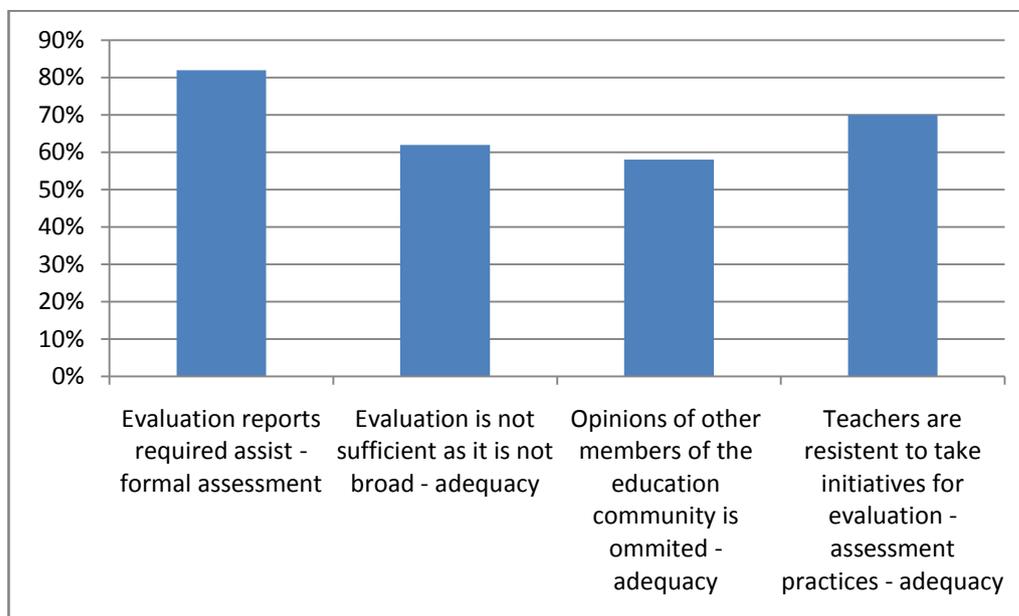


Figure 4: Coded Teachers' responses in interviews for research question 3 (Node "Length")

Conclusions

This project concerned the possibility of an institution implemented in a primary school in Greece becoming a systemic and sustainable reform. This institution of clubs is innovative in that it represents for the first time in Greek schools an organized attempt to educate gifted and talented children. The project has examined the legal context, the literature around the education of gifted and talented learners as well as the literature around educational reform and innovation and has allowed specific conclusions to be drawn (Subotnik et al, 2011; Rinn, 2012).

The new institution was welcomed by the members of the school and the wider community. The existing structures support the new institution to an extent. Evaluation of the implementation progress cannot be restricted to the present evaluation processes, but calls for new ones, which depend on the initiative of the educator and the school (Conway & Andrews, 2016).

Following the model of three dimensions of Hargreaves and Fink (2000), it is concluded that the extent of the reform is satisfactorily 'deep', but that there is room for improvement in its width and length.

Overall the findings show that there is a possibility for the clubs to be a systemic and sustainable innovation and achieve the desired lift of the Sisyphus rock (Kazamias et al, 2002). However, there are some challenges that must still be dealt with. The school context and culture, in which the Clubs are implemented, is not compatible with the requirements of the Clubs (Fullan, 2007; Holmen & Lyngsnes, 2015; Gilad-Hai & Somech, 2016).

At this final stage, it is important to point out the limitations to the generalization of these findings. The study examined data collected during a particular period in a specific school in Greece, which could serve as a stimulus for more research studies of a wider extent (Cohen et al., 2011).

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