
The “risk in teaching process” or the “didactic risk”: Views of the Greek teachers

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Abstract

In every aspect of everyday teaching process, the teacher is called to make decisions which determine the achievement of predetermined objectives. Every such decisions shall be taken considering a number of pre-conditions, as a part of a rational approach. Since teaching is a dynamic process in which every action can alter the expected outcome, any decision involves small or large “risk” rate. The current survey firstly tries to give a theoretical context of “didactic risk” based both on data from other scientific fields and on assumptions about planning the teaching procedure. Secondly, it examines the views of Greek teachers about what they think to be “risk in teaching process”.

Keywords: “didactic risk”, “risk in teaching process”, “teaching design”

1. Introduction

The teaching process is based on adaptations of scientific data, which are respectively derived from scientific research. However, provided that scientific research is open to inspection procedures, the results can be constantly changing, adding new data and reaching new conclusions. The constant creation of new science norms reveals that there is no absolute scientific truth. This conclusion as long as the parallel implementation in everyday teaching processes of theories, methods and techniques which are already under inspection, criticism or revision, reveals a practical contradiction. This means that the choice of a didactical theory or a teaching method/technique by a teacher is a scientific “at risk” decision. In order to make this decision, the teacher tries to anticipate every aspect and condition of the educational process. However, actual teaching constitutes a dynamic process with expected outcomes that can be assumed, but cannot be predicted and, therefore, is a priori contentious. Regarding this assumption, every decision made by the teacher involves “didactic risk”. In other words, the “didactic risk” could be defined between the rationalization of didactic options and, on the other hand, the decision-making process, always in order to reduce negative probabilities on implementing final decisions (Conway, 1984; Papadimitriou, 1986; Bullough, 1992; Papas, 2004; Shapiro & Stefkovich, 2016)

Scientific fields such as medical science or finance have already incorporated “risk” in their terminology, exhibiting a large part of their theoretical basis adapted to risk analysis and management, a part that always begins with the question “What can go wrong?”. In contrast, the pedagogical literature does not include the term “didactic” or “teaching risk”; although, it provides a large theoretical basis about didactic planning, everyday teaching and educational assessment

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which, combined to other scientific fields, could create a new theoretical background about “didactic risk”.

2. Rationalism and “risk” in didactic decision making process

2.1. An attempt to define “didactic risk” or “risk in teaching process”

The term “didactic risk” or “risk in teaching” is a scientific neologism and, consequently, there cannot be found a definition in literature. However, in other scientific fields, such as economic, medicine, environmental studies, food industry and insurance, the term “risk” is an integral part of their theoretical basis. The risk is generally defined as “a probability of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through preemptive action¹”. In economics, the risk relates to the possibility of a lower than expected return on an investment and is distinguished in basic, capital, economic, interest rate, liquidity, operations, political, etc. In insurance, the risk is focused on the “probability of a variable (such as burning down of a building) is known but when a mode of occurrence or the actual value of the occurrence (whether the fire will occur at a particular property) is not²”. A first view over these definitions highlights the term “probability” as a common ground. Therefore, a first attempt to define the “didactic risk” could be centered on the probability of failure of any phase of the teaching process, thus, the teaching process itself.

It could be assumed, therefore, that “risk” occurs where there are options to follow, thus decision to be made. At the same time, sometimes the teachers are called to overcome ethical dilemmas, such as individual rights against the habits of a community, traditional against hidden curriculum, personal approaches against business, the blending of religion and modern culture, equality against equity, etc. Therefore, the decisions which are made should be based on a deep analysis, to take account of a multitude of contradictory and variable data and, ultimately, to involve as much as possible rationalism (Dimitropoulos, 2007; Shapiro & Stefkovich, 2016;).

2.2. The “risk” in teaching process

After the above attempt of defining the term “didactic risk”, the researcher’s “microscope” should now focus on the actual teaching process and to what is meant by “failure” in each phase. The Greek and international literature summarizes the phases of teaching process to planning, implementing and evaluating of the procedures followed. The current survey focuses on these exact phases, through which it will be given a brief context of the parameters connected with the probability of failure and, therefore, “risk” is included (Smith & Dollase, 1999; Fry, Ketteridge & Marshall, 2009).

The phase of planning/designing is the first building step of the teaching process and involves a number of different and variable factors, which should be associated with corresponding pedagogical concerns. These concerns are related to the identification and the analysis of the educational need of the students, the formulation of the objectives, the choice of method and teaching techniques and the arrangement of classroom space and teaching time (Harden, 1986; Matsagouras, 2001; Trilianos, 2004).

¹ Read more: <http://www.businessdictionary.com/definition/risk.html> and <http://dictionary.cambridge.org/dictionary/english/risk> (last viewed: 01/03/2017)

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As to the first condition, the determination of the students' educational needs in planning the teaching process, the teacher must take into account for each student his/her cognitive and mental level, his/her performance, his/her trends, his/her self-image, his/her expectations, his/her family background and his/her social relations (Trilianos, 1992; Urdan & Schoenfelder, 2006). The assessment of the cognitive level and the performance for each student can be investigated through evaluation procedures at the beginning of the planning period (diagnostic assessment) but also during the academic year (Konstantinou, 2000; Leighton & Gierl, 2007; Black & William, 2009). However, if the teacher has the ability to regulate himself the knowledge evaluation procedures, the assessment of a student's mental level is a very complex process which requires an interdisciplinary approach (Tzouriadou, 2011). Similarly, forming an opinion about a student's family environment poses a priori limitations and does not present important findings –except some more glaring negative cases which may add a further problem in the planning process. Moreover, the investigation over the social relationships of the students could be either made by simple observation, either by interdisciplinary cooperation of the class's pedagogic team, or by more complex methods such as sociometry (Jennings, 1987; Kogoulis, 1988; Xochellis, 1993). However, to render simple observation as effective as possible, the teacher must gather data for a long and continuous period, which may slowdown the planning process. Similarly, interdisciplinary collaboration needs data which may not be available at the beginning of the planning period. On the other hand, the application of a sociogram captures specific data at a specific time: the dynamic in students' relationships within the school environment is particularly strong, and the data may change. Besides, the investigation of the social relationships between students may concern their self-perception, which is highly sensitive at the first school age and is associated with school performance (Hollander, 1978; Burnett, 1994; Leontari, 1996; Scott et al., 1996). Considering all above, it could be argued that the planning of teaching process at the beginning of each programming period becomes more secure only as to the cognitive level of the students (which can be determined by diagnostic assessment methods) but also as to the acceptance of students from their peers when sociometric technique applied. In other cases, the conclusions of the teacher are based on subjective estimations and depend exclusively on his studies. The decisions, therefore, which the teacher is called to make at the beginning of the school year and which concern the course of the teaching process, are based largely on non-existence of data, or in bad data; this fact automatically puts the decisions "at risk", which concerns the actual teaching design and should be described as "didactic risk".

The problem of the formulation of objectives concerns the expected learning outcome, which has to do about what is desired, what the teacher expects from students and what the students need to know in order to meet the demands of learning. The teacher must choose between various models of learning objectives, according to his own personal vision of teaching, having assessed both the activities required and the correlation between objectives and activities as well (Ammons, 1962; Barrows, 1996; Harden, 1986; Trilianos, 1991; Gagne et al., 2005). It should also be noted that in several cases, the definition of objectives could also be a subject of a pre-discussion between teacher and students. The formulation of the teaching objectives is a very important decision, as their clear determination affects the configuration of the method, the content, the teaching material, the opportunity to assess the learning outcome, and the students' motivation for designing their own actions. However, this decision making may encounter some obstacles when the objectives does not describe any activity, the description is unclear, the objectives overlap each other or they are not properly classified or describe attitudes (Mager, 2000). In each

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of these cases, the decision of the teacher is to define a large percentage of the learning process and the expected outcomes; for this reason, it must be based on rational criteria. However, although the definition of educational objectives is both a matter of politics and a philosophical consideration, their implementation in the teaching objectives remains always a scientific decision and, as already mentioned in the introduction of this article, any such decision involves "risk."

The initial decisions for the teaching plan are based entirely on the curriculum, which is a state law and determines the objectives and the learning contents for each grade, unit and chapter, also providing recommendations on teaching approach (Connely & Clandinin, 1988; Tyler, 2013). The Greek curricula are quite detailed. Since mid-2016, these curricula are under review and some new more open-type curricula have been introduced in the educational process. Nevertheless, the teacher is still confined by the legal status of the curricula, which forces him/her to base on them the whole teaching plan. Moreover, although the pedagogic team formed by all teachers of a Greek school is obliged to draw up the teaching plan, it is not entitled to introduce any supplementary special curriculum regarding the students' particularities. Thus, the teacher is trapped between the planning requirements imposed by the state and the needs for new curriculum directions, derived from everyday teaching (Apple, 1986; Harden, 1986; Frydaki, 2009; Ioannidou-Koutselini, 2013; Orlich et al., 2013; Christodoulou, 2015). The decisions made are expected to contain a great percentage of "risk" because, if the teacher ignores the official curriculum, he/she jeopardizes his/her professional future, and, if he/she does not implement its own innovations, he/she seems to ignore the needs of his/her students, adding new obstacles in achieving the learning objectives.

The choice of teaching methods and strategies is a key-requirement for the instructional design and requires for the teacher solid scientific training. This choice concerns the arrangement of the learning process, the organization of the class and the definition of the learning content. It is a very important decision, because it defines the structural framework onto which all teaching activities should fit. In addition, it also identifies the role of the teacher and defines the context in which the student is called to act. Through these activities, the teacher is able to assist his/her students, but also to cause their self-activity by setting him/herself some reflections (Bonner, 1999; Matsagouras, 2007; Fykaris, 2010, Orlich et al., 2013).

The choice of strategy and method are also associated with the development of the learning contents. As mentioned already, the learning content is determined by the curriculum and the teacher must follow the given framework. However, while as to the contents the flexibility of the teacher appears relatively limited, the new curricula have broadened his/her options as to the use of teaching materials. In any case, the teaching process is again rotated around the textbook, however parts of the curriculum may now be approached with interdisciplinary projects implemented in a 2-3 hours' time-zone per week, which is called "Flexible Zone" and is designed by the teacher in collaboration with his/her superintendent. This practice occurs for about 15 years and has contributed to the implementation of many different thematic projects, strengthening the openness of the school to the local community, as many of the projects require collaboration with other institutions. Also, this practice is enhanced by the new curricula, which allow the teachers to select his/her teaching material making additions to the existing one, along with the use of the official textbook and all these always within the framework defined by the curriculum. Therefore, the teaching material selection is another important decision to be made by the teacher on a regular basis. This decision is of particular importance especially in lessons with ideological orientation

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such as History and Religion, as the choice of texts, images and multimedia may contain ambiguities or cause ideological stresses (Seguin, 1989 · Burke, 2003 · Hatzidimou, 2012; Chrysafi, 2012). The “risk”, therefore, is not only about the actual reaching of the learning objectives, but about the normal progress of the class as well.

Another kind of decision that is requested to be made by the teacher at the beginning of the academic year is the classroom arrangement. The arrangement of the desks is the primary concern of a good space management, because it reflects the teachers’ didactic method and the students’ social relations. However, there are always examples that show a conflict between the teacher’s expectations and the student’s desires: the teacher should focus on the normal integration of students with low social acceptance which may be due their own fault (e.g. misbehavior) or not (e.g. learning difficulties or cultural differences). The forming of the groups and the arrangement of the desks is a decision that can be always reconsidered, while the course of learning process and the relations between the students change; in most cases these decisions could be considered as experimentations with desired but unpredictable results. For this reason, such decisions involve “didactic risk”. Also, the “risk” increases when there is a need for management of the teaching time and rational arrangement of everyday teaching activities; this is a decision concerning the teaching plan and has to be made by the teacher. The arrangement of teaching time is very complex and dynamic situation and is directly related to the general organization of the class (McCorskey & McVetta, 1982; Douglas & Gifford, 2001; Fykaris, 2010; Fraser, 2012; Rohrer & Samson, 2014).

We spent a large part for theoretical definition of the term “didactic risk” in the teaching plan, in order to highlight the actual importance of planning and the awareness of a rational decision’s consequences in the teaching procedure. On the next step, the teacher is called to implement what he/she has planned. The implementation is not a formal and linear process but contains its own dynamic and recommends a highly changing factor. In short terms, the learning outcome can be assumed but cannot be predicted. Anything can happen during the teaching procedure: questions that need further processing, misbehavior of some students, etc. In any case, the teacher must make a decision that exact moment, so as to maintain the normality of the process and aim the class to remain focused on the objective (Weston, 1992; Westwood, 1966; Douglas & Tenent, 2002; Frydaki, 2009; Fykaris, 2010). However, having already accepted the existence of “risk” in the preset planning of the teaching process, it becomes easy to consider its existence in decisions expected to be made at a moment.

2.3. Potentials, advantages and disadvantages of “didactic risk management”

While the attempt of defining the “didactical risk” focuses on the probability of a phase failure of the teaching process, the importance of the “didactic risk management” will continue to borrow its theoretical background from other scientific areas. The first main advantage of “didactic risk” management is its own identification. In this way, the teacher understands that the teaching plan is provisory and realizes the need for a continuing plan assessment and updating. The potential “risk” is identified, classified and clarified. Then, the teacher focuses on the issues of great importance and proceeds in the consideration of factors and variables that assist him/her to gain a new insight into the existing problems. Subsequently, he/she makes decisions that will assist him/her to face the problem and minimize potential negative results. In more general terms, the basic advantage of “risk” management is the focused attention on key-issues of the teaching procedure, which are basic to control the further process. It should be added, finally, that the process

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of “risk” analysis and management requires continuous evaluation of all actions (Stulz, 1996; Rasmussen, 1997; Mills, 2001).

In contrast, the tight time limits within which the teacher may proceed to the “risk” analysis emerges as the main management disadvantage, especially when it comes to single unit teaching plan. Since it requires a reassessment of many factors, even the simplest decision takes much time to be made. Also, the teacher may often consider his colleagues’ views about a problem, a fact that may lead to disputes and high time demands. Finally, since the pedagogic literature does not provide us with methodology that can assist the teacher to make a scientific decision for “risk” management (i.e. models of management, etc.), he is called to make improvisations, a fact that itself involves “risk” (Mills, 2001; Georgantopoulou, 2013).

Therefore, in order to better manage the “didactical risk”, the teacher should use not only the data he/she collects, but axioms concerning mitigation of irrational decisions. These axioms are summarized as follows (Neumann & Morgenstern, 1953; Koutsiafti, 2012):

- **Transitivity;** For every A, B and C, with $A > B$ and $B > C$, we must have $A > C$
- **Substitution;** If someone prefers A to B, then if he had to choose, he would choose the possibility to get A or C from the chance to get B or C.
- **Completeness;** For every A and B, either $A \geq B$, or $A \leq B$
- **Dominance;** If A and B are identical in all their characteristics, and there is even a feature that makes A better than B, then the A will be preferred.
- **Reflexivity;** If two options are the same and nowhere superior to each other, then one should be indifferent between them.
- **Indifference;** Between two decisions, we choose the one that gives us more gains
- **Continuity;** when there are three lotteries (A, B and C) and the individual prefers A to B and B to C, then there should be a possible combination of A and C in which the individual is then indifferent between this mix and the lottery B.
- **Invariance;** The preference among the options should not be influenced by the way they are presented to us. More specifically, two versions of an option recognized as equal when presented, should elicit the same preference even when presented separately.
- **Expansion;** An option that always preferred when separately compared with the other available alternatives, should always be preferred when one has to choose among all options in total.

The above proposals constitute a total of methodological rules that the teacher can utilize in making rational decisions for “didactic risk” management. However, before drawing any proposals on a subject for which the literature does not provides us with data, it would be extremely useful and interesting to investigate the teachers’ opinions about what they themselves consider as “didactic risk” or “risk in teaching process”. This research is the main subject of the current article’s empirical part.

3. Empirical part; The survey

3.1 Identity, methodology and sample

Overviewing the general literature and the above theoretical documentation of the term “didactic risk” on the basis of epistemology and teaching methodology, we can assume that, since it depends on a dynamic process such as teaching, the “risk” may vary per application field. In a very first approach, always based on the above documentation, the current survey has focused on the views of teachers about “didactic risk” and to what extent they perceive its existence in each field. For this purpose, we prepared a questionnaire, which was sent by e-mail to all primary schools of the Prefectural Administration of Aetolia & Akarnania, the largest in Greece; the answers were collected from February 3 to February 10, 2017. The answered questionnaires were 132 of total population of 1024 teachers (20% which is a secure sample).

The questionnaire contained 17 questions, 8 of which were about the respondent’s personal and office data (gender, age, school district of service, years of service, employment type, position). The rest were about “didactic risk”; 2 of them were open-type and 7 multiple-choice questions in a scale of “very high”, “high”, “moderate”, “low” and “none” undertaking “risk”. The data process revealed values in percentages which are referred as General Averages (G.A.), while other percentage values were highlighted by individual associations of the data. These associations connect the personal and service data to the “didactic risk” findings; e.g. how many of the teachers who have chosen “Great” in a question are men or serve in urban area and what is the deviation of this value from the overall average (G.A.). For reasons of limited space, only significant deviations from general averages are discussed in each question.

3.2 The survey findings; quotation, interpretation and discussion

The summary of the personal and service data of the participating teachers showed that:

- 59.1% of the participants are women and 40.9% are men.
- 15.95 belong to the age group of 20-29 y.o., 31.1% to the group of 30-39 y.o., 34.1% to the group of 40-49 y.o. and 18.9 to the 50+ group.
- Most of the participating teachers serve to urban areas schools (more than 10.000 inhabitants) by 40.9%, while a 31.1% serve to suburban areas (from 2.000 to 9.999 inhabitants) and a 28% serve in rural areas (less than 2.000 inhabitants).
- The teaching experience of 12.9% of the participants is 1-5 years, while 19,7% serve 6-10 years, 26,5% serve 11-15 years and 40,9% serve for more than 15 years.
- The 80.3% are permanent teachers and 19.7% are substitute teachers.
- The 35.4% holds a position of responsibility (headmaster, school counselor, etc.) and the 64.6% does not.
- 80.3% of the participants are general education teachers, 3.8% are special education teachers, 4.6% are kindergarten teachers, 4.6% are English language teachers, 3% are physical education teachers, 1,5% are teachers of music, 1.5% are teachers I.T. and 0,7% are art teachers.

As to the individual questions about “didactic risk”:

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Question 8 is divided in 2 sub-questions. The first of them concerns about the extent to which a teacher feels that takes “risk” when the daily timetable is reconfigured. In a Greek public school, this is a relatively common phenomenon and the most frequent reasons for this to happen is a sudden change to the school’s teaching staff ordered by the educative administration bureau, a sudden absence of a teacher or a non-planned event (such as a superintendent’s visit). In this question, the teachers answered that they take relatively high “didactic risk”. A 46.2% answered that the “risk” is “very high” and “high” (17.4% and 28.8% respectively), while 36.4% answered “low” and “none” undertaking “risk” (23.5% and 12.9%) and a 17.4% chose “moderate”. The vast majority of those who chose “very high” belongs to the age group 40-49 y.o. (the age group 49+ is completely absent), while, as to the work experience, the dominant category is 10-15 years (34.8% vs 26.5% of the G.A.). Those who chose “high” risk are 30-39 y.o. (56.2% vs 31.1% of the G.A.). A “moderate” risk has been undertaken by teachers of general education (100% vs 80.3% of the G.A.) 20-29 y.o. (+10% to the G.A.). The “low” risk selection gathered many 40+ y.o. teachers (83.8% vs 53% of the G.A.) and many other specialties (English language and kindergarten teachers), while incorporates a great percentage of headmasters (48.3% vs 35.4% of the G.A.). Finally, “none” option gathers more women (76.5% vs 59.1% of the G.A.) and shows very low impact on urban areas (only 6.5% compared to 40.9% of the G.A.). Briefly outlining the profile of these responses, it could be argued that the “didactic risk” levels seem to reduce concerning teachers of greater age and work experience who serve to non-urban schools, while these rates increase in the younger age groups.

The second sub-question of question 8 is about the use of another curriculum than the official one. This parameter has to do with the experimental introduction of new curricula, the sudden imposing of a new curriculum (ordered by the Ministry of Education) and the reform of the current one as to the objectives, the content and the proposed teaching activities with personal innovations introduced by the teacher (in order the everyday teaching process to meet modern challenges such as learning difficulties or/and a multicultural context). During the academic year 2016-17, many of the curricula have been revised and their introduction to schools has been made by a simple e-mailed order from the ministry, without having planned any further training for the teachers on them. Consequently, the answers to the sub-question “How high do you think is the ‘didactic risk’ that you take when you are called to use a new curriculum, beyond the official one?” are more clear; “very high”: 16.7%, “high”: 41.7%, “moderate”: 24.2%, “low”: 12.39% and “none”: 4.5%. As for the deviations from the G.A., the “very high” option has been selected by all specialties, dispersed almost evenly as to the years of service. A “moderate didactic risk” is considered to have been taken by the 40-49 y.o. age group and by the teachers in rural areas. The great percentage of permanent teachers think that the “didactic risk” is “low”, while most of the women of 15+ years of service think that there is no “risk” at all. Therefore, it can be assumed that the introduction of a new curriculum seems to create insecurity among teachers.

Question 9, is an optional open-type question related to the previous one, asking for the participants to refer if, according to them, there is any other act that is “risk-taking”. There were received 27 answers, i.e. 1 from 5 teachers has added its own proposal to those of question 8. The largest number of proposals (11 from 27) concerns views and aspects of everyday teaching; “didactic risk” can be found in interdisciplinary approach of a subject, in experiential activities, in some complexed activities (without defining them), in the introduction of a new teaching method, in the use of general-type advice such as “you should study more”, in the organization of the class without including school environment factors, in the integration of I.T. in the teaching process, in

the discussion with the students of issues from everyday life, in implementing projects that might engender conflicts between the teacher and the local community, in the teaching material reforming and in reducing homework. Two more issues must be added to the above categories; there two answers concerning teachers who try to separate quarreling students and the time spent in managing indiscipline. A significant number of answers (8 to 27) concerns staff movements (transfers, etc.) in the middle of the academic year or long-term absence of teachers. Also, there are 2 answers about changing the arrangement of desks and sudden classroom changes due to various unpredicted conditions. Other responses consider the control and the limits in the work of the teachers, the addressing to students with special educational needs, while one sentence refers that “there is no didactic activity at-risk”.

In question 10 (“To what extent do you think that you take ‘didactic risk’ when you involve your students’ parents in planning a new school activity?”) the choices are even clearer. A 26.5% of the participants answered “very high”, a 34,8% chose “high”, a 23,55 chose “moderate”, a 12,1% answered “low” and just the 3% chose “none”. In the “very high risk” category men outweigh women, while a great dispersion of specialties can be observed (68.6% teachers of general education vs 80.3% of the G.A.), as opposed to the “high risk” category which includes only teachers of general education. A “moderate risk” has been taken by women and the wide age group of 40+ (67% vs 53% of the G.A.) with many years of service. Finally, no “risk” existence gets higher percentages in permanent teachers.

Question 11 (“In your opinion, how many ‘risk’ do you think that you take, when you decide to change a teaching method?”) focuses on methods and techniques. These changes cannot be sudden but they should be introduced after careful study and consideration of several factors, however, they can be responsible for changes on the learning style when they occur during the flow of the academic year. The responses are focused in a high percentage on the choice “moderate” (32.6%), while the choices “low” and “none” show equal distribution (16.7% each). Regarding this distribution, we must focus on the “extreme” answers; “very high risk” shows 23.5% vs a 10.6% of “none risk”, so the answer takes a positive sign. The “very high” and the “high risk” options show low integration of teachers from rural areas (12.9% and 13.6% vs 28% of the G.A.). A “low risk” has been taken by the age group of 40+ (72.7% vs 53% of the G.A.) and those of many years of service (63.6% vs 40.39% of the G.A.). Finally, the option “none” gathers a great number of women.

Question 12 (“Do you think that you take ‘didactic risk’ when you teach a single unit (one/two teaching hours) without using the official textbook, but your own didactic material?”) attempts a primary record of Greek educational timeliness, as the curriculum reform in certain subjects such as the Religious Lesson, allows the teachers to design the teaching process more freely, rendering the official textbook as optional. The answers to this question are prone to “none” (26.5%), while the other options show relatively spread percentages (“very high”: 17.4%, “high”: 17.4%, “moderate”: 18.8% and “low”: 20.5%). Teachers from rural areas are completely absent in the “very high” option, as men outnumber women. The “moderate” choice shows equal distribution of women and men. The “none” option is dominated by women (71.4% vs 59.1% of the G.A.) and permanent teachers. Therefore, it is clear that the views of the teachers present a slight tendency to “no didactic risk” taking in a one/two hours teaching process without the official textbook.

Related to the previous, question 13 (“In which of the following courses do you think is the higher ‘didactic risk-taking’ when you teach parts of the course without the official textbook?”),

enabled more than one selection, with a parallel stipulation that a “part of the course” may be perceived more than one or two teaching hours. In this question, a significant number of teachers answered “none” (31.1%) and very few answered “all” (1.5%). The course which collected the more options was Mathematics (41.7%), followed by History (33.3%), Physics (18.9%), Modern Greek Language (18.2%), Religion (15.39%), Social & Political Education (5.3%), while there are very few answers for other courses (less than 3%), but there is no lesson that has not be selected.

The answers to question 14 (“How high ‘didactic risk’ do you think you take when you remodel the daily timetable by transferring courses i.e. from 1st to 4th teaching hour”) are very clear. The largest percentage of respondents think that they take “low” (28.8%) or “none risk” (24.2%). “Very high”, “high” and “moderate risk” have taken respectively 16.7%, 13.6% and 16.7%. The specific correlations between the answers data follow the G.A., as the only comment that can be made is a greater presence of men on “low” and “none” options. In conjunction with the question 8, which asked the presence of "didactic risk" on sudden changes of timetable laid out under the responsibility of management (not of the teacher), it appears that the teacher does not feel his own changes put the teaching procedure “at-risk”.

The answers are divided to question 15 too (“In your opinion, do you take “didactic risk” when in a repeated indiscipline of a student, you involve his/her parents in your intervention?”). By the term “intervention” is meant any kind of action or set of actions that the teacher undertakes to design, in order to achieve the desired result, i.e. the improvement of discipline. In this effort, the teacher has the potential to engage the student’s parents, either by informing them about their child’s behavior, either asking for their co-operation in a long-term intervention. The answers to this question are distributed almost equally (“very high”: 20.5%, "moderate": 18.9%, "low": 19.7%, and "none": 16.7%) with a tendency to positive ("high": 24.2%), as the statistics remain close to G.A.

The opinions are even clearer in question 16 (“How high ‘didactic risk’ do you think that you take when you decide to set up an intervention project for students that you are suspect facing specific learning difficulties?”). The question focuses on that preliminary stage where the teacher tries to make a more thorough observation. The answers to this question focused on “very high” (25.38%), while in other options the percentage was equal distributed. As a notable special statistic can be underlined the strong presence of men to the “moderate” option and that of permanent teachers to the “none” option.

The last question (17) was optional and asked participants to make a comment or add something to the findings of the survey. Only 8 comments were found, 2 of them concerning the planning of the teaching process. Specifically, the first one stated that “planning assumes didactic risk” and the second one that “when the planning is based on literature data without consideration of other factors, the risk is minimum. Anyway, the everyday teaching includes unpredictable facts!”. Other answers focused on planning factors (“The risk is an amount inversely proportional to the teacher’s performing competence, that is a good curriculum and objectives understanding, along with innovative teaching practices”), on the learning environment (“The didactic risk needs to be based on solid psychological environment”) and on the group synthesis (“In a small or large degree, risk is an integral part of the teaching procedure. The intensity of the experience for each teacher depends mainly on the homogeneity/heterogeneity of the class”). However, a comment points that “when the main objective of the teaching process is to improve learning” there is no

Zagkotas, V., Fykaris, I. (2017). The “risk in teaching process” or the “didactic risk”: Views of the Greek teachers. *International Journal of Social Sciences and Education Research*, 3(4), 1068-1081.

“risk” because the objectives are constantly redefined. Another commentator shows a positive attitude towards “risk”, noting that “the teaching procedure should be a constant risk, so it does not lose its interest both for teachers and for students as well”, while a last one refers a John W. Gardner saying “One of the reasons people stop learning is that they become less and less willing to risk failure”. All commentators are over 40 y.o. and permanent teachers.

4. Result and conclusions

From the interpretation of the above findings, we can assume that:

- Teachers recognize the existence of “risk” in various aspects of the teaching process.
- The “risk” increases its rates when the students’ parents are required to be involved in procedures of planning and implementing an intervention.
- When the teacher contributes him/herself to the remodeling of the occurring timetable, believes that he takes low “didactic risk”. On the other hand, when the changes are de facto imposed by the school administration, the “risk” levels rise.
- Frequent changes in personnel such as sudden transfers in the middle of the academic year sets “in risk” the achievement of the learning objectives.
- Teachers seek more autonomy and believe that are able to manage it. When they have the opportunity to use other teaching material beyond the official textbook, they feel more free and consider the “risk” levels as low.
- However, teachers seem to feel insecure when, for more than 1-2 teaching hours, are required to teach Mathematics and History, while important percentages are shown for the Religious Lesson, Physics and Modern Greek language. Nevertheless, 1 from 3 feels that he/she wouldn’t address any problem in any course.
- Alterations in teaching method or techniques do not consist “risk” for teachers, as they shape their own didactic tools, a fact that makes them more secure. However, the “risk” rate increases when the teacher is obliged to plan short-term classroom interventions for kids with learning difficulties.

The above quantitative data, the interpretations of the findings and the participants’ comments firstly highlight the existence of “risk” in various phases of the teaching process, while, on the other hand, emphasize on the importance of teaching plan. The teachers seem to trust themselves when they are actively involved to teaching plan and feel more secure when know that they are working in stable work environment that offers alternatives. It should be pointed, however, that planning requires an excellent cooperation between the members of a pedagogic team and a high level of pedagogical culture. Moreover, planning the teaching processes for a class, requires not only consideration of the factors that synthesize the learning context, but an interdisciplinary cooperation of all individuals involved. In any case, the reduction of “didactic risk” or of the “risk in teaching” is inextricably linked to the designing of the teaching process.

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