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# PLANNING AND EVALUATION DURING EDUCATIONAL DISRUPTION: LESSONS LEARNED FROM COVID-19 PANDEMIC FOR TREATMENT OF EMERGENCIES IN EDUCATION

### Thanassis Karalis<sup>i</sup>

Laboratory of Pedagogical Research and Lifelong Education, Department of Educational Science and Early Childhood Education, University of Patras, Greece

### Abstract:

The aim of this paper is to formulate a proposal for responding to emergencies in education, either at the level of the education system at a national or regional dimension (macro level) or at the level of an organization (meso level). The impetus of this proposal stemmed from the crisis caused by the COVID-19 pandemic in education systems and educational/training organizations worldwide, which has resulted in the disruption of educational function. It should be clarified in advance that this proposal does not concern crises of the education system itself, but situations where a major crisis at another level of public life creates a secondary crisis in education, an emergency in which education cannot fulfill its function.

**Keywords:** program planning, evaluation, non-formal education, crisis management, COVID-19 pandemic

# 1. Introduction

The proposal presented here is based on and starts from two distinct scientific areas, that of Human Resource Management and especially Crisis Management and that of Planning and Evaluation, especially, in regards to the latter, its dimension that concerns nonformal education activities. It is an eclectic approach aimed at using approaches from the above two areas with the aim of creating an interdisciplinary proposal, enriched with those elements that can form the basis of a model for responding to emergencies or secondary crises at various levels of the education system. Although in a possible new crisis with similar characteristics there will be enough accumulated experience to implement solutions that have already been tried during the COVID-19 crisis, we consider that the proposal formulated here may also be applicable in crises with different

<sup>&</sup>lt;sup>i</sup> Correspondence: email <u>karalis@upatras.gr</u>

characteristics, in smaller-scale crises, or even in crises that occur in developing countries and require an immediate response from their education systems.

## 2. COVID-19 pandemic and educational disruption

Given that the literature on COVID-19 pandemic and its impact on education is already rich and is reasonably expected to grow even further, we believe that a detailed report on the history of the crisis and its implications for the function of education systems around the world will not contribute much (for a detailed description so far, see indicatively: Owusu-Fordjour, Koomson, & Hanson, 2020, pp: 89-92).

However, we consider it necessary to focus on two important issues of this crisis. The first concerns its intensity, as no pandemic in the past has caused so many problems in education. The main reason we had for the first time such a large disruption of education around the world is the massification of education in recent years. In previous pandemics, relatively small percentages of the population, especially in secondary and tertiary education, had access to education. This crisis was not only global but arose almost simultaneously in all countries. It is worth noting that at the time of its peak, set at the end of March 2020, more than 90% of the students worldwide were outside educational structures (UNESCO Institute for Statistics Data, 2020). During the crisis and the response to the problems caused in education, we argue that a feature emerged which we had never observed before. In particular, during the restoration of the educational function, the formal education organizations seemed to lose several of the features of this type of education (such as the relative stability of the curriculum, the fixed daily schedule, the availability of all teachers), acquiring in practice characteristics of non-formal education (such as flexible and ad hoc solutions, differentiation in media and teaching methods, changing daily schedule). In fact, the solutions provided were more like nonformal education planning solutions or interventions and less similar to the traditional function of a school or a university.

International organizations, such as OECD and UNESCO, acknowledged the problem and undertook important initiatives to address it (see indicatively: Huang, R.H., Liu, D.J., Tilli, A., Yang, J.F., Wang, H.H., et al., 2020; Reimers & Schleicher, 2020). In particular, UNESCO introduced the terms *emergency* and *educational disruption* for the effects of the crisis on education systems and called on governments and international organizations to take action to address the problem, using for the said solutions the term *maintaining undisrupted learning*, i.e. the continuity of learning in any way even outside the formal learning environments. This has obviously arisen as an option taking into account the situation worldwide and not only in developed countries, where more or less Internet was the media through which maintenance was possible. The statement from UNESCO Director-General Audrey Azoulay is rather illustrating: "We are entering uncharted territory and working with countries to find hi-tech, **low-tech** and **no-tech** solutions to assure the continuity of learning." (our emphasis). In such situations, we believe, as we already mentioned, that the theory and practice of planning non-formal education

programs may contribute to finding solutions perhaps more than the theory and practice of planning for formal education systems.

# 3. Theoretical underpinnings

Below, an attempt will be made to formulate the content of a strategy or model for the treatment of emergencies in education, using, on the one hand, theoretical approaches from two different epistemological traditions, namely Planning and Evaluation in non-formal education and Human Resource Management, and on the other hand, evidence from the response itself to the crisis internationally. The emphasis will be on macro and meso level, i.e. the level of an educational system and/or the level of an educational organization.

Administrative Science and even more Human Resource Management have extensively studied Crisis leading to a remarkably extensive corpus of theoretical and empirical knowledge, mainly focused on crisis management. Tokakis, Polychroniou, & Boustras (2018, p. 153), using in detail the relevant literature, underline that "a crisis causes instability having an immediate impact on the structure and operation of a system. This affects individuals and groups and marks a dysfunctional period in the smooth development. A system is in a state of crisis when those making decisions believe their values are being seriously prohibited, when they feel insecure and consider an immediate reaction mandatory to protect those values." We consider the dimension of the threat of values contained in the above definition to be very important, especially for systems such as education. In general, the crisis is a major event, with a potential negative impact affecting the basic assumptions and the existential core of a system or organization. There is usually an asymmetry between the probability of an outbreak and its impact, i.e. the likelihood of a crisis is generally considered low, though its impact may even threaten the survival of an organization (Fearn & Banks, 1996; p.1; Pauchant & Mitroff, 1992; p. 12; Barton, 1993, p.2). Consolidating elements from crisis definitions, Pearson & Clair (1998, p. 61) define organizational crisis as a "low probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly". There are generally three stages or phases in a crisis (Granville King III, 2007, p. 187), the stage before the outbreak of the crisis (the pre-crisis), the main phase of the crisis and the post-crisis period, although there are theoretical approaches that recognize more phases (see Sellnow & Seeger, 2013).

In most cases, the proposed schemes for the crisis phase focus not so much on steps or chains of actions, but mainly on qualities (for example, leadership, types of intelligence, emotional issues, composition of crisis management teams). The first and urgent priority remains firmly the reaction or coping with the crisis and the rehabilitation. Returning to normality includes the assessment and/or evaluation of all actions and measures undertaken, but mainly the "lessons learned", i.e. what are the conclusions from crisis management and how they relate to a better preparation for a future crisis, its avoidance or, if this is not possible, the elimination of possible damages. However, in

many organizations *the amnesia syndrome* occurs, i.e. the questions raised by the crisis are not addressed, the data are not analyzed and ultimately the organization does not learn from the crisis (Boin & Lagadec, 2000, p. 188). Especially for the post-crisis phase, Bundy et al. (2016, p. 1677) distinguish between two perspectives, the internal and the external, the former concerns the processes within the organization, while the latter concerns the image of the organization in relation to the various stakeholders. As far as the former is concerned, they focus on lessons learned within the organization and its organizational learning capacity, while a very important dimension is what they define as *vicarious learning*, i.e. the experience of peer organizations that faced a similar crisis situation. As for the latter, they define *social evaluations* as an important dimension, since these are directly related to the image of the organization before and especially after the crisis.

Regarding the issue in question, the area of Program Planning has developed greatly over the last fifty years and is directly linked to the scientific area of evaluation; in fact, it could be said that as in real life, so also in theory, program planning cannot be separated from evaluation. In particular, Program Theory has contributed significantly to the understanding of the operation of programs and the development of schemes on the basis of which we can understand both the internal structure of a program as well as the expected and also the unexpected results from its implementation. According to Funnel & Rogers (2011, p. 31) "a program theory is an explicit theory or model of how an intervention contributes to a set of specific outcomes through a series of intermediate results", and is usually displayed by what is called a logic model, i.e. a diagram which essentially conveys how we perceive a specific program. Logic models can be grouped into four broad types: pipelines, outcome chains, realist matrices and narratives (Funell & Rogers, o.c., p. 32). These approaches help us perceive and understand programs more clearly, as they provide us with tools to interpret causal relations between different actions, outputs and outcomes, in other words they illuminate all program components so as not to be considered as a "black box". In the field of non-formal education programs, various planning models have been proposed from time to time, which in almost all cases include the evaluation in its various types and approaches, such as those of Caffarella & Daffron, (2013), Houle (1996), Cervero & Wilson (1994), Boone, Safrit & Jones (2002) and Brookfield (1986). Some of these models are circular, linear or even in some cases limited to indicate principles and parameters that it is considered necessary to be taken into account and have a specific content during the planning and implementation of programs. Thus, in some cases they are sequential with reference to specific steps, in others they include the relations and interactions between different components and sometimes they take the form of a very detailed logic model. Moreover, in several cases, resembling actions and theoretical approaches, they have the form of ad hoc descriptions for specific actions, the role of factors and stakeholders and the proposed arrangements and solutions that are considered necessary.

However, these models do not involve unusual situations and large-scale crises, which threaten the core of the program or intervention. In these cases, i.e. in emergencies,

the use of approaches from the steps proposed by the literature on crisis management is important and can enrich the literature on planning and evaluation.

We consider it necessary to clarify at this point that any program, intervention or even response to a crisis is articulated around a problem or issue, for which the program or the intervention is the answer. We know well in advance from literature that all problems are not of the same nature. Rittel & Webber (1973) deal with the notion of wicked problems. Some features of wicked problems are: "wicked problems have no stopping rule, solutions to wicked problems are not true-or-false, but good-or-bad, there is no immediate and no ultimate test of a solution to a wicked problem, every solution to a wicked problem is a "one-shot operation" because there is no opportunity to learn by trial-and-error, every wicked problem is essentially unique and the planner has no right to be wrong" (Rittel & Webber, oc , pp. 162-166). Much later Gouberman & Zimmerman (2002, pp. 1-2) provide their seminal classification of problems based on the degree of complexity they have, considering that there are three categories of problems, Simple, Complicated, and Complex ones. As they characteristically point out, Simple problems are like following a recipe, in most cases it is necessary to master rules and techniques, but once these are followed, we have a very high assurance of success. On the other hand, Complicated problems may contain subsets of simple problems but they are not reducible to them, while in Complex problems sometimes formulae, rules and techniques do not work, sometimes expertise is not enough, they have special requirements and the understanding of local and specific conditions are very crucial to successfully cope with the situation.

# 4. MEET – A Model for Educational Emergencies Treatment

As follows from the aforementioned, we are dealing with the situation that the education systems and organizations were faced at macro and meso level as a Complex problem and here below we shall attempt to formulate a proposal for what the "answer" might be. The model we propose (see Figure 1) if seen from the point of view of planning and evaluation of educational programs, differs from those found in the literature in that it is not about actions of planning and evaluation of common situations, but about situations that threaten the very core of the system or organization. If seen from the point of view of crisis management, it differs in terms of the content of the crisis, since the literature does not include, at least to a large extent, proposals and models for managing educational crises. Regarding the form of the approach, the proposed model is sequential with the exception of two important components, namely communication and evaluation, which are longitudinal and run through the other components.

We consider such approaches to be more appropriate as the basis of a theoretical proposal for the planning and evaluation of responses to emergencies in education, regardless of the cause of such emergencies, which is external to the education system or organization. Analyzing the components below, first their theoretical extensions will be listed and then some examples from the COVID-19 crisis will be given, regarding the macro level, i.e. the education system, and/or the meso level taking into account that

higher education institutions differ from other institutions of the education system at least in terms of their degree of autonomy.

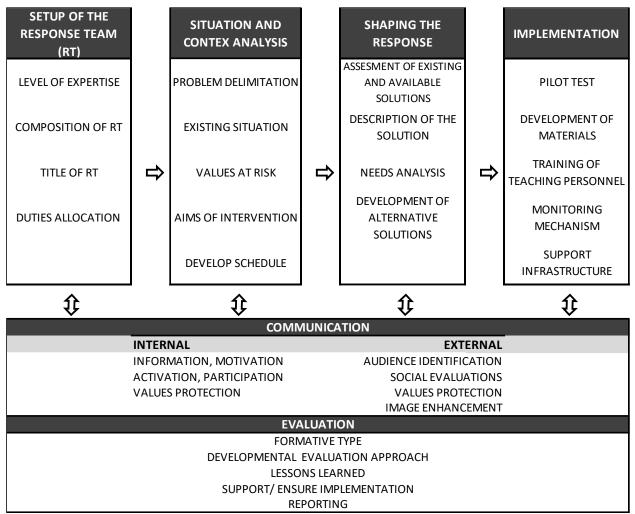


Figure 1: MEET – A Model for Educational Emergencies Treatment

# A. Setup of the Response Team

During a crisis, the most important element is perhaps, apart from the organizational culture and the circumstances of the outbreak, the Crisis Management Team (CMT). However, apart from the above factors, it is clear that the *composition of the team* and especially the overall levels of expertise, will to a large extent determine the success of the plan to address the crisis. In the cases considered here, the Response Team (RT), depending on the level of intervention, could be at a national, peripheral, local or institutional level. Obviously, managing a crisis requires the *involvement of experts*, in this case experts in educational planning, evaluation, e-learning, to mention the most important fields involved. Nevertheless, at this point there is a very common misconception, that the expert is completely detached from the political dimensions of an issue. However, in order to limit ourselves to the issue at hand, namely the impact of a crisis in education, contrary to the above mentioned perception, it is necessary for the expert to take into account and understand the political and ideological stakes of both the

crisis as well as the response to it, *which after all constitutes a dimension of his/her expertise*. As Cervero & Wilson (1994, p. xii) characteristically point out concerning the case of planning adult education programs: "*nearly all models for planning programs for adults have treated power, politics, and ethics as noise that gets in the way of good planning; in so doing, these models set up dichotomies between rationality and politics or, more generally, between individual planners and the social structures within which they act"*. It is obvious that here we are not referring only to political parties or functions, or at least not to what constitutes the current political scene of a region, state or country, but to wider political issues which include those mentioned above but refer also to conflicting interests, symmetrical or asymmetrical power relationships, consensus or conflict levels. Needless to say, at the macro level these issues are more obvious, but at the meso level they exist both within organizations and in their relationships with society – in either case, it is necessary to take them into account when determining the content of the response.

In the event of an emergency in education in macro or meso-level, it is a good idea to include in the *RT title* the external cause of the crisis, an indirect and consistent reminder that this is not a common situation (not "*business as usual*" situation). From the point of view of crisis management, we know that success in crisis management will be primarily judged by whether the team is not a *group* of people but really a *team*. It is also necessary that the composition of the team meets certain criteria, such as previous efficient cooperation of its members, good personal relationships, heterogeneity in terms of fields in order to produce more ideas and propose multi-level solutions and accurate determination of areas of competence and duties of each member (Granville King III, 2002. pp. 240-243). Finally, although it is expected that RT members will have similar fields and levels of specialization, it is necessary to make a first *duties allocation* in order to ensure the conserving of strength and to avoid any overlaps.

### **B. Situation and Context Analysis**

In all approaches to planning and evaluating programs mentioned in the previous section, a thorough analysis of the existing situation and the broader context of an intervention is always the first step. Under normal circumstances, this planning phase can take a relatively long time, at least in relation to the life cycle of the program. For example, it is not uncommon for a non-formal education program of a three-month duration to have a planning phase even twice as long as the implementation phase. In cases of emergency, however, this phase is necessarily extremely short because solutions need to be implemented very quickly. A solution that in normal circumstances has a long implementation time frame, in a crisis situation can prove to be completely ineffective and useless if applied after the appropriate time.

As in any planning process in non-formal education, it is necessary to capture and, above all, to *delimit the problem* to which the intervention will respond. Underestimating some aspects of the problem could reduce the effectiveness of the intervention, while magnifying them leads to a waste of human and material resources. For example, in the crisis caused by COVID-19 the problem was not the provision of a high level of quality

education, but the continuation of the educational function, as is evident from the second section of our analysis and the policy texts of international organizations. In other words, it is necessary to clarify that in itself the cessation of educational work constitutes the greatest loss that macro or meso-level education can suffer, and therefore restoration efforts are essentially a process of minimizing losses and damages, i.e. a damage control. The launching of the *analysis of the current situation* should include two important dimensions, the first is the extent and expected impact of the crisis and the second is the analysis of the broader stakes and the expected areas of consensus and conflict. As far as the former is concerned, the experts' estimates for the cause of the crisis (in this case the experts on the COVID-19 pandemic), its escalation, intensity and duration will determine the time and space frames to respond to the crisis. The latter will greatly determine the success of the crisis response plan, prioritizing the areas of consensus and minimizing the focus on the areas of conflict on the inside of an organization or society at large.

Nevertheless, not all potential risks are immediately apparent, or are they primarily identified in public discourse, but these will certainly emerge after the end of the crisis and will be directly related to the effectiveness or ineffectiveness of the solution. As we have seen, in the definition by Tokakis, Polychroniou, & Boustras (2018), an important element of the crisis is that "*values are being seriously threatened*." Therefore, the key in this phase is to identify *values at risk*, so that they are not only protected but also strengthened by a timely and successful response to the crisis (this is what is reflected in the public discourse: "*the crisis is an opportunity*"). For example, education as a public good has been threatened by the COVID-19 crisis, since, if the public education system around the world failed to respond, it is clear that analyses of the fact that it is lagging behind in relation to private education, would be on the political agenda of the day after. The fundamental values in regard to the macro level are found in institutional texts, such as the Constitution and laws, while for the meso level those values of an organization are usually included in its mission statement.

Upon completion of the analyses mentioned above and the selection of the key points for the solution, it is necessary to set the *objectives and goals of the intervention*. At this point, it is not enough to formulate them, in most cases it is necessary to rank them, i.e. estimate their possible priority and perhaps their sequence over time. In addition, in cases of emergencies, such as the ones in question, their quantification is necessary most of the times (for example: *by the end of the first week operation will have been restored in* 40% *of primary schools*, 90% *of students will have access to available materials*).

One of the most important tools in the planning process of any non-formal education program is the *schedule*. In the case at hand the duration is usually, if not always, not predetermined. Therefore, the timetable is established in relation to the achievement of specific milestones, such as the determination of the parameters of the proposed solution, or the start of the pilot phase of operation and is then revised every time.

#### C. Shaping the Response

In this phase, it is necessary to determine the content of the proposed solution with reference to all the arrangements involved. In the case of the crisis in question, almost all the countries and organizations where there was an Internet connection decided to provide online education solutions. Unlike the usual situations, the effectiveness of the response is not determined in this instance mainly by the optimal technical and pedagogical level, but by the absolutely feasible: The quickness of response is more important than the quality of the solutions, since there will be room for improvement in quality as the intervention unfolds - on the contrary, delays in crises prove to be critical and often crucial. In a crisis lasting two or three months, solutions need to be launched if not in the first few days, at least in the first or second week at the latest. Since macro and meso-level education systems, due to the nature of their operation and mission, are not used in emergency reactions, it is almost certain that in the first few days the response will be relatively low. However, if the proposed arrangements are compatible with the system's response capabilities (i.e. the requirements for materials and qualifications of those involved), then very soon the snowball effect will occur, and the application of the arrangements will be generalized.

The first action of this phase concerns the assessment of existing and available solutions, depending on the know-how of those who participate in the implementation, so that they can carry it out successfully. In the present crisis in almost all education systems and organizations at macro and meso level, the solution of distance education and especially online education was selected, which was essentially the only one available. In most cases we had a combination of synchronous and asynchronous education. When choosing the best among the theoretically available solutions, it is necessary to rely on existing infrastructure (hardware, software, educational content), as this is expected to increase the chances of a quick and reliable solution (see also OECD 2020, p. 2). An important element at this point is the assessment of the know-how that exists within the organization or the education system. Especially at the meso level it is necessary to determine which of the solutions are in-house and which of them require outsourcing. In general, it is preferable to limit dependence on external factors because in a time of a large-scale crisis they are likely to collapse. However, because this is not always possible (for example, using the Cloud in the case of software or using platforms with educational materials) it is necessary to illustrate the needs for external sources and ensure to the maximum extent possible their response. In other words, the key criterion for selecting response parameters is the degree of assurance of uninterrupted operation. We emphasize that in the formulation and detailed description of the proposed solution, it is necessary to take into account all the dimensions of the educational function, and not to treat the solution as a *pipeline for the transfer of knowledge*, since education is much broader than knowledge and skills acquisition. The fact that students, their families and their wider social environment have been affected at many levels by the crisis, students' relationships with each other and with teachers, the levels of engagement with their studies, trust in their school/university, the functions of the wider educational

community, are some indicative issues to be under consideration. An important issue at this point is the existing inequalities regarding access to and profiting from the good of education, inequalities already established before the crisis which are now becoming more apparent. Inclusion of as many students as possible is a core value of education nowadays, at least at the level of declarations and mission statements.

In every intervention or program of non-formal education the phase of investigation, analysis and identification of educational/training needs of the target populations and potential learners is widely recognized as the most crucial part of the preparation (see for example: Cervero & Wilson, 2016; Caffarella & Daffron, 2013; Nadler & Nadler, 2003; Boone, Safrit, & Jones, 2002). This is because the response of the programs' content and curriculum to the needs of potential learners is expected to increase their participation (Sakkoulis, Asimaki, & Vergidis, 2018; Karalis, 2015a). In the field of educational program planning there is already significant know-how as the needs analysis processes are quite complex research works, require a high level of expertise, and take a long time. In most cases the gap approach is followed, which means determining the gaps in competencies that a target population has in relation to a job that needs to be performed, i.e. the distance between existing competencies and the competencies that are necessary. The phase of needs analysis must follow the phase of choice of a solution, because here we are not referring to general gaps, for example to deficits in software or to pedagogical and didactic approaches, but to deficits in relation to the specific software selected or to pedagogical and didactic deficits in relation to the corresponding requirements introduced by the solution. All available data sources can be used for needs analysis, such as statistical data for the use of existing solutions selected; additionally, we note that in this case, needs analysis apart from teaching personnel should also include other groups, such as students. It is also necessary to explore other types of needs, apart from these of the teachers, such as the need for human resources for support or the need for hardware, software and educational materials.

Finally, in this phase, the first *shaping of alternative solutions* should take place, i.e. those solutions that will be proposed in case that in the implementation process the selected solution either fails or deviates significantly from the objectives set. In many cases in crisis treatment it is common to refer to Plan B, but in this case, we are not dealing precisely with a completely different plan, but with complementary adjustments for the improvement of the chosen solution. The reason for this is that there will be no time for a total shift and reorientation of the organization or the education system.

### E. Implementation

This is obviously the main phase of the response of an educational system or organization. It is clear that the actions of this phase are not necessarily serial, as in many cases it may be necessary to repeat them (e.g. teaching staff training) or even to implement them simultaneously. In any case, the actions of the pilot test and the training of the teaching staff are of critical importance.

The *pilot test* should necessarily include all the elements of the solution (for example, conducting courses using synchronous and asynchronous mode) in order to identify any eventual problems -problems inevitably appear in every innovative solution. The pilot test will obviously include representative and not necessarily favorable cases (i.e. not only cases with a high degree of compatibility with the elements of the proposed solution) and will be conducted by teachers with a high level of familiarity with all elements of the response/solution.

The *development of materials* for the training and support of all the people involved, teaching personnel and students, is absolutely essential as most of them do not have previous training or experience with the proposed solution. In developing these materials it is necessary to take into account that there will be no time available for studying them extensively, and therefore they should be fully comprehensible, emphasizing the points where the greatest difficulties are expected to arise but also familiarizing potential users with all levels involved in the tasks they are asked to perform.

The training of teaching personnel is also a very critical phase that aims to a wide and comprehensive update of teachers in the technical features of the elements (synchronous and asynchronous mode) they are called to operate with. Regarding training, it is important that the findings from the needs analysis have been taken into account, so that it focuses only on the necessary issues. On no occasion should this training be an opportunity for a general update of the teaching personnel, the objective is not to teach them how to do their job, but how to carry out this specific task. Training also has a secondary objective, i.e. the motivation of the teaching staff and their broader possible participation in the selected solution. The latter is especially important for the success of any crisis management effort, but especially for education systems it is very critical for two reasons: the first concerns the fact that education systems due to their mission do not have a strictly hierarchical structure, any interventions within them are based on active participation and succeed only when an intervention has obtained the consent of all, particularly that of teachers and students. The second, an outcome of the first, is that crisis management should not distort these basic principles, but rather strengthen the autonomy, empowerment and active participation of all those involved in learning processes.

As for the way and means of this training, this can take the form of a MOOC, although it is difficult to develop and put into operation a complete MOOC lesson in a short time. Mass online seminars (webinars) are probably the best solution because they can be designed and implemented in a very short time. In this case, it is necessary, on the one hand, to use the same software that will be used for synchronous mode, so that the medium itself is the subject of the training, while for the promotion of the motivation mentioned above, it is necessary for all RT members to participate. Another solution, more time-consuming, but more effective especially for the macro level, relates to seminars organized on the basis of the *cascade model*. According to this model, a first cohort of trainers is trained, who after being qualified become the trainers of a second cohort of trainers, while these procedures are followed until the entire target population

is trained and qualified (Cheese, 1986; Hayes, 2000; Kokkos & Karalis, 2009; Karalis, 2016).

The creation of a *monitoring mechanism* is necessary before or immediately after the start of the implementation phase. Throughout the emergency it is necessary to collect data for the progress of the system on the most frequent time base possible. Depending on the level, macro or meso, the data may include information from learning analytics, or information from educational structures integrated into the system for the macro level, data referring to the number of courses or teaching hours carried out for the macro or meso level, the number of the teaching personnel and the students who participate, and so on. It is obvious that the existence of this mechanism is necessary so as to make improvements and corrective interventions, but these data are also valuable for communication, as will be shown below. Based on the data of the monitoring structure, the RT will decide whether, when and to what extent elements of the alternative solutions will be activated. In the framework of this mechanism, data can be collected from the users (teachers and students), regarding the degree of satisfaction, the problems they face and their suggestions for the improvement of the solution selected.

Apart from the monitoring structure, it is necessary to create a *support infrastructure*, at macro or meso level. This can include any mechanism, central or decentralized, that aims to support all those involved, but especially teachers and students. This infrastructure may include online communication, technical support, helpdesk, etc. Special care should be taken for those students who are unable to follow the arrangements for any reason. Support infrastructure can also serve as a starting point for creating networks and collaborative communities, enhancing motivation and active participation, as well as exchange of practices.

### F. Communication

As already mentioned, two elements of the proposed scheme are longitudinal, in the sense that they are considered necessary in all phases; these are communication and evaluation. Both remain in the field of RT intervention, i.e. they are not assigned to external to the RT parties. This means that some of RT members need to have the required competence in these two areas. Literature on the role of communication in crisis management is extremely rich and concerns many issues, such as the contribution of communication to crisis management, but also image repair for organizations that are considered equally responsible for the crisis. Here, however, we will focus mainly on the role of communication for the successful outcome of the response, since as it has already been mentioned, the crisis either at macro or meso level was not caused by the organizations themselves but by a cause external to their function. Following this approach, we consider that the definition of Sellnow, & Seeger (2013, p. 11) Is absolutely sufficient to describe the role of communication in this case, stating that "communication is about the construction of meaning, sharing some interpretation or consensual understanding between senders/receivers, audiences, publics, stakeholders or communities". One point that needs to be understood within RT is that there should be no confusion between dealing

with the crisis and its communication management (Granville King III, 2002), or to put it better, it should be clear that the arrangements which will be made are aimed at tackling the crisis, and not communicating an enhancing image of the RT, the organization or the leadership at macro and meso level. No communication management can replace dealing with the crisis, while arrangements that will be taken solely on the basis of their popularity, are not necessarily the best possible; indeed often the opposite happens: the measures and arrangements required are asymmetric, divergent from the usual arrangements because the crisis situation is different from usual condition, whereas those involved have a tendency to return to the safety zone of usual practices.

Communication during an emergency must necessarily have two different, but not divergent, dimensions. The *internal* one that concerns the interior of the organization and the *external* one that concerns the stakeholders, but also the society at large. In the first dimension, communication aims mainly at the motivation and participation of those who are called to lift the burden of the treatment, but also the activation of those who may contribute with best practices and suggestions. Although consensus tends to prevail during a crisis, it is rather likely that there will be strong reactions to any solution chosen as a response to the emergency. These objections will not be aimed only at the proposed solution itself but at the leadership or even the RT, starting from pre-existing causes of conflict or other organizational dysfunctions, which is why Cervero & Wilson (1994) attach great importance to the political dimension of planning. In these cases, it is necessary for the communication management to contribute to the de-escalation of the confrontation so that the treatment of the emergency situation does not turn into a field of conflict, resulting in the collapse of the response.

In the second case, communication aims to convince parties external to the system or organization (audiences, publics, stakeholders, communities – depending on whether we are talking about macro or meso level) of the organization's or system's effort to fulfill its mission not only under normal circumstances but in all situations. This dimension concerns two points that we have already pointed out, what Boin & Lagadec (2000) refer to as social evaluations, but also the threat to the values of the organization or system (Tokakis, Polychroniou, & Boustras, 2013). Successful management of a crisis, but also its communication management, can contribute not only to the above but also upgrade the image of a system or an organization, as happened during COVID-19 pandemic, for those public health and education systems who responded to the challenge.

### G. Evaluation

Although in many cases evaluation is identical to the recording, data collection and data analysis from questionnaires, in the discipline of Evaluation several approaches, models and applications have been developed over the last fifty years, theoretically processed and practically tested, based on which we can evaluate an action, an intervention or a program starting from different points and pursuing different goals (for a detailed presentation of the evaluation models see: Stufflebeam & Shinkfield, 2007). The choice of the approach proposed here is based on the very nature of the intervention and the

problem: as we have seen, this is an intervention with a high degree of complexity and strong innovative elements. Initially, a first choice would be to focus on *formative* and not on *summative* evaluation, in terms of identifying discrepancies, obstacles, problems, and formulating proposals, taking immediate action to fix them while the intervention is being implemented (Scriven, 1967). Such an approach presupposes an effective feedback channel between the implementation team and the evaluation team, so that the proposals of the latter are activated immediately by the former (Karalis, 2015b, p. 23). This is the reason why in this case we consider necessary, as for the dimension of communication, that evaluation should take place within the RT as well, so that there is not even a need to create and to operate this channel efficiently, and so as to correct deviations faster. As in the case of communication, the highest possible level of competence is necessary in relation to the discipline of Evaluation within the RT.

Michael Quinn Patton, a leading theorist in the area of Evaluation, proposed an evaluation approach for the cases of complex programs or programs with no fixed model, to move beyond formative and summative approaches, aiming at capturing lessons in real time: Developmental Evaluation that "... calls into question three traditional mainstays of evaluation: purpose, evaluand, and timeline... this definition assumes a fixed program, a delimited time period, and a goal-attainment purpose. Developmental Evaluation is a way of being useful in innovative settings where goals are emergent and changing rather than predetermined and fixed, time periods are fluid..." (Patton, 2011, p. Viii). Developmental Evaluation does not have judgement as its main aim, but coevolution with the program and contribution to the development of solutions. Proposed mainly for the evaluation of complex and innovative programs, we think that Developmental Evaluation is the most suitable approach to evaluate an intervention for an emergency response to a crisis. The purposes of Developmental Evaluation include "help social innovators explore possibilities for addressing major problems ... identify innovative approaches and solution, support adaptation in complex, uncertain and dynamic conditions, ... identify emergent processes and outcomes..., support ongoing development and adaptation to changing conditions" (Patton, o.c., p. 46).

The evaluation of the intervention is not only useful in order to improve the arrangements while the emergency continues or to specify, after its end, the degree of adequacy that it finally had in relation to dealing with the situation and restoring normality. It is valuable and irreplaceable mainly in terms of what we learned from the emergency in relation to normal situations, for example what we learned from distance education about ways to improve face to face education. It is about the *lessons learned*, which are one of the main actions of the post-crisis phase as far as the discipline of crisis management is concerned. Some useful "questions" that can be asked in relation to lessons learned in the Developmental Evaluation approach are (Patton, o.c., p. 236): "1. *what is meant by a "lesson", 2. what is meant by "learned", 3. by whom was the lesson learned, 4. what's the evidence supporting each lesson, 5. what's the evidence the lesson was learned, 6. what are the contextual boundaries around the lesson, 7. is the lesson specific, substantive, and <i>meaningful enough to guide practice in some concrete way, 8. who else is likely to care about the lesson, 9. what evidence they want to see, and 10. how does this lesson connect with other "lessons"* 

*and knowledge*" (for a detailed presentation of Developmental Evaluation approach, see Patton, o.c.).

Finally, a *Report* needs to be compiled after the emergency has ended and normality has been restored, focusing on the actions taken, the deviations and improvements over the initial planning, the effectiveness – that is, the degree to which the initial objectives have been achieved, the lessons learned and the suggestions for follow-up actions. The final Report may be compiled from or based on intermediate reports that have been drawn up during the intervention.

# 6. Conclusions

Considering that in situations like the ones that arose in education systems worldwide during the COVID-19 pandemic, the conventional knowledge from the area of educational planning for formal education may not be sufficient, we tried to formulate a proposal, a model for managing emergencies and restoring educational function (MEET-Model for Educational Emergencies Treatment). The approaches used here come from two distinct areas - that of Planning and Evaluation of non-formal education programs, and that of crisis management, based on theoretical and empirical knowledge from the field of Human Resource Management. Obviously, given the fluidity that is one of the key features of planning in non-formal education, the proposed components of this model cannot be considered as a recipe for dealing with all emergencies, but instead need to be adapted to the specific implementation circumstances every time, as is the case with all models of planning and evaluation in non-formal education, and especially models involving complex programs or interventions.

We consider that the most important lesson learned of this situation is not so much whether urgent solutions worked, although this is important and was the main objective of all the interventions worldwide. What is worth studying after returning to normality, is the implications that have arisen for the day after, that is, what adjustments need to be made, and to what extent the experience of a different situation can be used as a starting point for reflection on the conditions that until now defined the basic dimensions of education and learning in formal education systems and organizations.

# About the author

**Thanassis Karalis** is Professor of Lifelong Learning and Adult Education in the Department of Educational Science and Early Childhood Education at the University of Patras. He is Director of the Laboratory of Pedagogical Research and Lifelong Education, member of the Quality Assurance Unit, coordinator of the Center for Teaching and Learning at the University of Patras, and during the COVID-19 pandemic member of the Committee for the maintenance of educational function. For the last thirty years he has been working in the area of planning and evaluation of adult education and non-formal education programs, including more than twenty years in distance education and e-learning.

#### References

- Barton, L. (1993). *Crisis in organizations: Managing and Communicating in the Heat of the Chaos.* Cincinnati: South-Western Publishing Company.
- Boin, A., & Lagadec, P. (2000). Preparing for the Future: Critical Challenges in Crisis Management, *Journal of Contingencies and Crisis Management*, 8(4), 185-191.
- Boone, E.J., Safrit, R.D., & Jones, J. (2002). *Developing Programs in Adult Education* (2<sup>nd</sup>). Illinois: Waveland Press.
- Brookfield, S.D. (1986). Understanding and Facilitating Adult Learning. San Francisco: Jossey-Bass.
- Bundy, J., Pfarrer, M.D., Short, C.E., & Coombs, W.T. (2016). Crises and Crisis Management: Integration, Interpretation, and Research Development, *Journal of Management*, 43(6), 1661-1692.
- Caffarella, R.S., & Daffron, S.R. (2013). *Planning Programs of Adult Learners: A Practical Guide*. San Francisco: Jossey-Bass.
- Cervero, R.M., & Wilson, A.L. (2006). Working the Planning Table: Negotiating Democratically for Adult, Continuing and Workplace Education. San Francisco: Jossey-Bass.
- Cervero, R.M., & Wilson, A.L. (1994). *Planning Responsibly for Adult Education: A Guide to Negotiating Power and Interests.* San Francisco: Jossey-Bass.
- Cheese, J. (1986). Cascading the Training, *Innovation in Education and Training International*, 23(3), 248-252.
- Fearn-Banks, K. (1996). *Crisis communication: A Casebook Approach*. Mahwah: Lawrence Erlbaum Associates.
- Funnel, S.C., & Rogers, P.J. (2011). *Purposeful program theory: effective use of theories of change and logic models.* San Francisco: Jossey-Bass.
- Glouberman, S., & Zimmerman, B. (2002). Complicated and Complex Systems: What Would Successful Reform of Medicare Look Like? Ottawa: Commission on the Future of Health Care in Canada, available: <u>https://secure.patientscanada.ca/sites/default/files/Glouberman E.pdf</u>
- Granville, King III (2007). Narcissism and Effective Crisis Management: A Review of Potential Problems and Pitfalls, *Journal of Contingencies and Crisis Management*, 15(4), 183-193.
- Granville, King III (2002). Crisis Management & Team Effectiveness: A Closer Examination, *Journal of Business Ethics*, 41, 235-249.
- Hayes, D. (2000). Cascade training and teachers' professional development, *ELT Journal*, 54(2), 135-145.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (March, 27 2020). The Difference Between Emergency Remote Teaching and Online Learning. <u>https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning</u>
- Houle, C.O. (1996). *The Design of Education* (2<sup>nd</sup>). San Francesco: Jossey-Bass.

- Huang, R.H., Liu, D.J., Tilli, A., Yang, J.F., Wang, H.H., et al. (2020). Handbook on Facilitating Flexible Learning During Education Disruption: The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak. Beijing: Smart Learning Institute of Beijing Normal University.
- Karalis, T. (2016). Cascade approach to training: theoretical issues and practical applications in non-formal education, *Journal of Education and Social Policy*, 3(2), 104-108.
- Karalis, T. (2015a). *Programme Planning*. Patras: Hellenic Open University.
- Karalis, T. (2015b). *Programme Evaluation*. Patras: Hellenic Open University.
- Kokkos, A., & Karalis, T. (2009). Educating the Adult Educators: Implementation and Evaluation of the first National Adult Educators Education Program in Greece. In G. K. Zarifis, & E. Panintsidou (eds.), *Educating the Adult Educator: Quality Provision* and Assessment in Europe. Thessaloniki: University of Macedonia, 79-86.
- Mitroff, I.I., Shrivastava, P., & Udwadia, F.E. (1987). Effective Crisis Management, *The Academy of Management EXECUTIVE*, 1(3), 283-292.
- Nadler, L., & Nadler, Z. (2003). *Designing Training Programs* (2<sup>nd</sup>). Houston: Gulf Publishing.
- OECD (March, 23, 2020). Education responses to covid-19: Embracing digital learning and online collaboration. <u>https://oecd.dam-broadcast.com/pm\_7379\_120\_120544-8ksud7oaj2.pdf.</u>
- Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). *The Impact of COVID-19 on Learning – The Perspective of the Ghanaian Student*, European Journal of Education Studies, 7(3), 88-101.
- Patton, M.Q. (2011). Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use. New York: Guilford Press.
- Pauchant, T.C. and Mitroff, I.I. (1992). *Transforming the Crisis-Prone Organization: Preventing Individual, Organizational, and Environmental Tragedies.* San Francisco: Jossey-Bass Publishers.
- Reimers, F. M., & Schleicher, A. (2020). A framework to guide an education response to the COVID-19 Pandemic of 2020. OECD. Available: <u>https://www.hm.ee/sites/default/files/framework\_guide\_v1\_002\_harward.pdf</u>.
- Rittel H.W.J., & Webber, M.M. (1973). Dilemmas in a General Theory of Planning, *Policy Sciences*, *4*, 155-169.
- Sakkoulis, D.P., Asimaki, A., & Vergidis, D. (2018). In-service Training as a Factor in the Formation of the Teacher's Individual Theory of Education, International Education Studies, *11*(3), 48-60.
- Sellnow, T.C., & Seeger, M.W. (2013). *Theorizing Crisis Communication*. West Sussex: Wiley-Blakcwell.
- Stufflebeam, D.L., & Shinkfield, A.J. (2007). *Evaluation Theory, Models, & Applications*. San Francisco: Jossey-Bass.

Tokakis, V, Polychroniou, P., & Boustras, G. (2018). Managing conflict in the public sector during crises: the impact on crisis management team effectiveness, *International Journal of Emergency Management*, *14*(2), 152-166.

UNESCO Institute for Statistics Data (2020, April 19). COVID-19 Impact on Education.

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