

Education and Training in Crisis Management

Šárka Hošková-Mayerová^{a*}

* Corresponding author: Šárka Hošková-Mayerová, sarka.mayerova@unob.cz

^a University of Defence, Faculty of Military Technology, Brno, Czech Republic

Abstract

Quality education is an indispensable prerequisite for all kinds of human activities. No area of human activity if it has to function properly can exist without sophisticated education that determines the quality of workers in the given area. Training of public administration officials is a very important step to ensure conditions for adequate response in case of disasters and other emergencies. Conditions for successful solutions can be created by acquiring professional knowledge and skills, having mastered technical and technological readiness to manage critical crisis situations and creating and updating legislation interlinked with harmonizing mutual cooperation with EU countries.

This article aims to highlight the inconsistency in educating “target groups” in the field of crisis management which is becoming a systematic problem in the educational system of the Czech Republic. According to § 39 of the Act no. 111/1998 Coll., on universities and on the change and amendments to other Acts, the military colleges and universities prepare specialists, particularly for armed forces. However, students, not being soldiers in active duty, can study there as well. Police colleges prepare experts especially for security forces. However, there can also study those who are not members of the security forces.

Moreover, the paper analyses the possibility to prepare “a common minimum”, which could be reflected in curricula of universities and colleges preparing students in the field of crisis management. The results of the analysis will be the base for the proposal, which would greatly help to resolve the situation.

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Keywords: Education in Crisis Management; Staff training; Civil Protection.

1. Introduction

Quality education is an indispensable prerequisite for all kinds of human activities. Training of public administration officials is crucial to ensure conditions for adequate response in case of disasters and other emergencies. Conditions for successful solutions can be created by acquiring professional

knowledge and skills, having mastered technical and technological readiness to manage critical crisis situations and creating and updating legislation interlinked with harmonizing mutual cooperation with EU countries. The issue that comes logically to mind is what knowledge and skills are necessary for crisis managers to manage challenges they have to face. The capacity of managers or crisis managers of particular properties to improve risk-preparedness is a function of the overall climate for risk-preparedness established within national and international policies. Therefore, their education and training should cover a wide spectrum of subjects such as micro-macroeconomics, business-government-society comprehensive knowledge, entrepreneurship, salvage and scrap disposal, outsourcing, risk management, organizational psychology, statistics, public relations, human resource management, rescue services, labour relations, accounting, information systems management, law and legislation, business ethics, strategic planning, logistics-related regulations, facilities location-protection-monitoring and many others depending on the sphere of major interest and specificities. The EU strives to create a minimum standard of knowledge required for public administration officials within the area of Civil protection covering the spheres known in the Czech Republic as crisis management, population protection, Integrated Rescue System, and civil emergency preparedness.

An important contribution to strengthening the security research in the Czech Republic consists of the role of universities and colleges in the educational process of future security forces professionals, public administration and further target groups in the field of crisis management, population protection, Integrated Rescue System, civil emergency preparedness as well as defence, public order and safety, critical infrastructure protection, protection of the economy as well as other protected interests in close relationship with so called security research and development of a comparatively new scientific discipline “security science”. (Martinek, et al, 2010).

What is the origin of the term crisis management? What is its history? The field of crisis management is generally considered to originate with Johnson & Johnson's handling of a situation in 1982, when cyanide-laced Tylenol killed seven people in the Chicago area. The company immediately recalled all Tylenol capsules in the country and offered free product in tamper-proof packaging.

Hence, crisis management is the application of strategies designed to help an organization deal with a sudden and significant negative event. A crisis can occur as a result of an unpredictable event or as an unforeseeable consequence of some event that had been considered a potential risk. In either case, crises almost invariably require that decisions be made quickly to limit damage to the organization. For that reason, one of the first actions in crisis management planning is to identify an individual to serve as crisis manager. (<http://whatis.techtarget.com/definition/crisis-management>)

What do best crisis management practices include? Do university curricula cover a broad spectrum of necessary theoretical knowledge, practical experience and skills? What organizations, companies and firm require and need specialists, professionals and experts in this branch? Why are branches such as crisis management, security management, emergency preparedness, security services, civil protection, population protection and national defence economics demanded nowadays? Are there experts in planning in detail for responses to potential crises and risks? Can they establish monitoring systems and practices to detect early warning signals of a foreseeable crisis? Are they able to establish and train a crisis management team or select an external crisis management team in a particular

business area? Do they manage to involve as many stakeholders as possible in planning and action stages? There are many similar questions arising when speaking about various types of properly trained and educated managers and crisis manager professionals. Since there are many studies covering the topics related to civil protection and population protection, the paper is going to focus on other closely related emergency and crisis critical issues. (Rackova & Hošková-Mayerová, 2013; Hošková-Mayerová, 2015).

2. Human resources

Crises come in different forms – as natural disasters, big anthropogenic accidents and disasters as social, communal and economic threats. (Antušák 2009, p. 13-17) Nowadays, a crisis is understood as a certain test of organization readiness and a chance to apply creative approaches to reach required goals.

Organizations are concerned with productivity and cost effectiveness crises in managing human resources. Even in the age of high technology, people are still the most important assets to an organization. Organizations, large and small are composed of people drawn from diverse population. These people differ in age, sex, religious beliefs, personal values, temperament, culture, intelligence, psychomotor skills, and education as well as in many other personal characteristics. These differences become important as applicants are compared to one another and decisions are made as to which employees are better suited for various jobs.

An equally important perspective is based upon anticipation of the skills an employee may need in the future. Skill demands will vary as jobs undergo changes and employees progress in their careers. Although changes in employee jobs will invariably results from the dynamic nature of a job content and interpersonal relationship, they are becoming more common as technology is brought into the workplace. Changes require that employees be prepared through training and development. Employees may also require training and development to prepare them for career progression. The training may take different forms: it may range from the relocation and rotation from an employee through various departments and locations to formal executive MBA programs at universities. (Rosicka, Hoskova-Mayerova, 2013).

3. Knowledge management

Both organizations and individuals deal with and manage knowledge. Ideas, information, values, data, collecting, sorting out, decisions and conclusions and many other expressions are categories related inevitably to managing knowledge and its role in a competitive environment. Individuals have been working with knowledge and experience since the Stone Age: they understood intuitively that more individuals are able to get more and survive better while cooperating, exchanging and sharing information and skills. Evolution process developed and brought methods how knowledge can be applied much faster and more efficiently. On the one hand, latest technologies elaborate scientific methods and pour out quantities of variable data; on the other hand, there are individuals trying to get the priceless information in order to win and fight for better positions in a highly competitive environment. The only problem consists in mastering methods how to reach relevant and needed data

and knowledge at the right time. Information, data and knowledge are characterized as the most valuable assets; they are protected, sometimes sold illegally and those are a powerful tool for being successful at the market. Therefore, the proper interlinkage and the 'supply and demand law' should work at the same time: available knowledge and awaiting individuals, a sender and sendee should reach the meeting point to exchange and use these priceless assets.

As Zdena Rosická stated in (Rosicka, 2006a): "The purpose and goal of knowledge management are targeted at three crucial phenomena:

- a person should keep at disposal the knowledge he/she needs,
- the knowledge should be available at the time he/she needs it,
- it should be nobody but the person who needs this knowledge indeed".

Considering the approach to preparation knowledge, the user must carry out selection by him/her, and neither system nor technology can substitute for him/her. In order to succeed and select the right one, he/she must acquire knowledge and information becomes a fundamental block of knowledge.

One of the most significant principles in knowledge creation process are knowledge assets. To successfully manage this process, the organization has to fully understand and map its risky and uncertain assets to discover the most suitable way of using them for its specific needs. It has to be borne in mind at all times that knowledge assets are highly dynamic, oftentimes "risky raw material" with interconnection and relations, and new findings and their source are often already accessible inside the organization. (Rosicka, 2006a).

4. Training, development and education

Training is the creation of environment where employees may acquire or learn specific, job-related behaviours knowledge, skills, abilities and attitudes. If one wishes to make distinction between training and development, it would be that training is directed at helping employees perform better on their current jobs, whereas development represents a future-oriented investment in employees. Development is based on the fact that an employee will need an evolving set of knowledge, skills and abilities to perform well in the succession of positions encountered during his/her career. The career-long preparation of an employee for this series of positions is what is meant by employee development.

Many discussions of training emphasize a difference between training and education. When this distinction is made, training programs are considered to be designed to limit possible employee responses to those behaviours preferred by an employer. Such responses may be preferred for a variety of reasons. They may be more efficient, safe or simply consistent with organizational goals or philosophy. If, for example, a dangerous situation occurs such as hazardous material spill, an employee may be trained in the most appropriate ways of coping with it. The intent is to have the employee react only in certain ways without hesitation. It is in his/her limitation of responses that training differs from education.

Education is considered a means by which a range of possible employee responses is increased rather than reduced. Education represents a broadening of the individual so that he/she may be prepared to assess a variety of situations and select for him/herself the most appropriate response. Although many unskilled, semiskilled and skilled positions would primarily require training, supervisory and

management positions require element of education. As more and more employees are called upon to exercise judgement and to choose among alternative solutions to job problems, training programs have sought to broaden and develop the individual through education.

Selection of training programs should explicitly consider the ability of the employee to master the material and to subsequently use it. This is not only an important motivational issue but also an important efficiency issue. A training program requires the efficient use of resources. Employee failures in the training program itself or on the job after training represent not only personal failure and frustration but wasted organizational resources as well. It should be considered that careful selection will make the program more successful, and of course, any evaluation of success should consider the objectives of the program. If, for example, the objectives deal with the skills necessary to run a sophisticated expensive and complex security monitoring detection system, the careful selection of trainees is essential.

A related and important issue is the extent to which the selected employees are motivated to succeed in the training program. Trainee motivation is an essential ingredient in the training process. Individuals who are not committed to learning in the training program can defeat the well-designed effort. Unfortunately, poorly motivated trainees are common enough to be a problem of most companies. Perhaps, the single most common reason for a lack of trainee motivation is the lack of actual or perceived link between success in the training program and success and rewards on the job. When this link can be established for trainees, a firm is more likely to see trainees committed to leaning in the program and to transferring that training to the job. This means that during training, trainers should focus on the objectives of the program and integrate those training objectives with known trainee objectives as early as possible. Actual evidence of the benefits that have accrued to fellow employee as a consequence of the training program would be useful at this point as well.

When the firm finds it necessary to select participants for training programs from among its employees, and when that training is necessary for career progression in the company, attention should be directed toward ensuring the fairness of the selection process.

Who can prevent and manage emergencies?

Properly trained and educated staff supported by relevant crisis managers. Any property or structure is always at risk: regardless of the fact whether it is at risk from the daily forces of slow decay, attrition, neglect or it is at risk in the face of nature's occasional eruptions or irruptions or at risk from depredations of war or political or economical pressures. What does risk-preparedness approach cover in case of a valuable structure and its components? Selecting the most relevant approach to safety and risk-preparedness related to valuable structures calls for particular aspects in this field. There are three crucial aspects to be examined by crisis managers:

- preparedness phase,
- response phase,
- recovery phase.

4.1 Preparedness phase

Preparedness phase should include efforts focused on the hazards themselves and the reduction of related risks. Detection and early warning systems as well as improving the ability of the both property occupants, users, runners and emergency response professionals are to respond adequately in urgent situations.

The risk can be reduced at its source, the property ability to resist and tackle the consequences of risk can be improved, adequate warning of impending disaster can be provided and emergency-response plans can be developed in advance.

The vulnerability of a property to particular hazards should be reduced; therefore, the hazards are simultaneously eliminated to a certain extent and hazardous activities could be reduced as well. The structure should be able to resist or tackle the consequences of a disaster and both structure and its components must be sufficiently reinforced; either the structure reinforcement is applied to counter the forces imparted by close busy traffic or sprinkler systems for fire are installed as well as smoke detectors to warn of fire. Fortunately, Central Europe territory is not susceptible to serious earthquake.

Emergency-response officials together with occupants should develop an emergency-response plan for a property. The plan should be based on qualities of the property, its condition, needs in disaster situation and be able to prepare on-site individuals for assuming appropriate responsibility before, during and after disaster. Preparatory activities in support of the response plan would include occupant fire drills, high water or flood drills and training as well as property documentation focusing priorities for salvage or other activities during disaster. The result should be competent disaster-response authorities and brigades having adequate awareness of the nature of the property qualities, and of appropriate means to limit damage to these qualities during response without compromising human life or safety. Activities promoting these objectives would include awareness courses for fire officials, on-site simulations to ensure property-sensitive emergency vehicle access routes across properties.

4.2 Response phase

Response is a function of the adequacy of preparedness measures, including appropriate response plans and training for occupants and emergency-response individuals and teams. Many activities during the “response” phase can also be understood as an early phase of recovery.

The response plan should be prepared well in advance. It is very important to ensure that all may have ready and immediate access to it in case of an emergency. It is crucial that the response plan be familiar and comfortable for all involved. Simulations and regular trainings are necessary to ensure readiness for use the plan if needed.

4.3 Recovery phase

The effectiveness of recovery measures is a function of measures planned and implemented in advance of a disaster. The quality of mitigation activities focused, for example, on reconstruction, depends on the quality of documentation prepared for the building before loss.

Efforts focused on mitigation of negative consequences of a disaster are targeted at means by which the full negative impact of a disaster can be reduced or compensated for. Activities should consist in

exhaustive recording prior to demolition of non-securable elements, stabilization of the structure and contents following a disaster, removing or undoing negative consequences (to remove debris, fire water, flood water, mud) and providing temporary housing for those who might have lost homes. Activities should also be focused on the physical reconstruction of a property; neighbourhoods and infrastructure, there should be included effort to rebuild a sense of stability and purpose in the minds of those affected by the disaster.

Efforts to reinstate and enhance preparedness measures should involve assessment of the adequacy of preparedness measures in place before the disaster, and the implementation of preparedness measures enhanced to reflect experience learnt. Monitoring to evaluate risk-preparedness effectiveness is highly important in order to achieve such improvements.

The capacity of managers or crisis managers of particular properties to improve risk-preparedness is a function of the overall climate for risk-preparedness established within national and international policies.

5. Discussion and Conclusion

The issue that comes logically in mind is what knowledge and skills are necessary for crisis managers to manage challenges they have to face. From the above mentioned issues becomes evident that the scope is very broad: they should be multi-talented within the range of management skills, able to adopt cross-functional behaviour, adaptable to changes within work environment, they should have abilities to motivate and supervise others, master communication, negotiation, persuasion, forecasting, be enthusiastic, assertive, personally creative, and innovative. Therefore, their education and training should not miss large spectrum of subjects such as micro-macroeconomics, business-government-society comprehensive knowledge, entrepreneurship, salvage and scrap disposal, outsourcing, risk management, organizational psychology, statistics, public relations, human resource management, rescue services, labour relations, accounting, information systems management, law and legislation, business ethics, strategic planning, logistics-related regulations, facilities location-protection-monitoring and many others depending on the sphere of major interest and specificities.

It would be unthinkable to ensure the safety of citizens without educated experts and specialists as well as managers taking required emergency measures, officials dealing with routine security problems within public administration, and, perhaps, also politicians who can effect decisively adopting crucial measures, particularly, in the field of legislation.

The concept of education in the sphere of crisis management, which had been adopted by the resolution of the National Security Council no. 14 of November 16, 2004, covers the issue of crisis management, civil protection, national defence, protection of the economy and further measures for crisis situations, internal security and order, fire protection and Integrated Rescue System.

Inconsistence and “sectionalism” in educating “target groups” in compliance with the above mentioned concept of education is becoming a systematic problem. According to § 39 of the Act no. 111/1998 Coll., on universities and on the change and amendments to other Acts, the military colleges and universities prepare specialists, particularly for armed forces. However, students, not being soldiers in active duty, can study there as well.

Police colleges prepare experts especially for security forces. However, there can also study those who are not members of the security forces. (Martinek, et al, 2010).

Some colleges and universities prepare specialists in fire protection branch (Technical University in Ostrava), in health branch (University of South Bohemia) or in crises management (Silesian University in Opava). However, there are also students who can be included in the “target groups” after graduation.

In terms of expanding number of these colleges, it appears necessary to analyze the possibility to prepare “a common minimum”, which could be reflected in curricula of universities and colleges preparing students in the field of crisis management.

Intention to specify a particular “common basis” within educational systems for target groups and searching for ways how currently available capacities within security branch might be used for the broadest spectrum of stakeholders in the security, is inconsistent with administrative bodies (neither the Minister of Defence nor the Minister of the Interior), which are unable to affect even partially curricula at these universities and colleges (§ 95, paragr. 8, 9 of the cited Act). This situation is paradoxical considering the fact that both public schools, University of Defence and Police Academy of the Czech Republic are fully covered from the budgets of the Ministry of Defence and Ministry of Interior. The remedy has to be sought in harmony with maintaining basic academic freedoms.

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References

- Antušák, E. (2009). *Krizový management: hrozby - krize - příležitosti*. (Vyd. 1., 395 s.) Praha: Wolters Kluwer Česká republika.
- Hošková-Mayerová, Š. (2015). Geospatial data reliability, their use in crisis situations. *The complex physiognomy of the international security environment*. Sibiu: „Nicolae Balcescu“ Land Forces Academy Publishing House, 192-196.
- Martínek, B., Wiederlechner, J. Kellner, J. (2010) Potřeby vysokoškolského vzdělávání v oboru bezpečnosti z pohledu GŘ HZS ČR, university study text, available from <https://moodle.unob.cz/mod/resource/view.php?id=9326>
- Rackova, P., Hoskova-Mayerova, Š. (2013) Current Approaches to Teaching Specialized Subjects in a Foreign Language, CD: ICERI2013 Proceedings, 4775-4783, Sevilla, Spain, 2013, 6th International Conference of Education, Research and Innovation, ISBN: 978-84-616-3847-5, ISSN: 2340-1095.
- Rosicka, Z. (2006a) Risk in Problems of Knowledge Management. *Sixth International Scientific School. Modelling and Analysis of Safety and Risk in Complex System 2006*. Saint Petersburg: Russia, 2006. ISBN 5-8088-0181-8.
- Rosická, Z.: (2006b) *Safe and Sustainable Society, Reality or Future?* SPU Nitra, 2006, ISBN 80-8069-728-0.
- Rosicka, Z., Hoskova-Mayerova, Š. (2013) Efficient Methods at Combined Study Programs, The Procedia: Procedia - Social and Behavioral Sciences 131, WCETR 2013, 135–139, doi:10.1016/j.sbspro.2014.04.092