*Boykova K.*¹ Risk management in the context of project work in education

¹ Boykova Krasimira, Ass. Prof. University of Plovdiv "Paisii Hilendarski", Bulgaria

Abstract: Each project is initiated and implemented in an environment of ambiguity, and there always is a certain risk in achieving its goals. This risk needs to be managed. The process of risk management is a series of actions aimed at the identification, analysis, evaluation, response and monitoring of potential risk events or situations that may negatively affect the objectives of the project and provide a reasonable belief that these objectives will be achieved. In the following report there are various approaches, procedures and methods of risk management in project activities. It also outlines the major risk characteristics and potential sources: internal and external. Risk management is viewed as a complex, continuous and multidimensional process that is ongoing throughout the project life cycle and goes through various stages: risk identification, analysis and risk assessment, cautionary measures to prevent or reduce the impact of risk to an acceptable levels, monitoring (control) risk. Some of the most popular strategies against risk are presented – avoiding (elimination) risk, accepting (tolerance) risk, reducing (imitating) risk and transferring (sharing) it. The second part of the report is devoted to the results of potential risks identification in the implementation of an educational project related to the ongoing training of kindergarten teachers in the Republic of Bulgaria. This training is realized featuring teachers form Plovdiv University's Pedagogy Department as tutors. There are also some specific measures to counteract the risks identified in the activity. The parameters set for the report volume allow inclusion of only a small portion of the identified risks and measures to counteract, and require them to be presented descriptively in the textual version, not the table of risk (as in the original).

Keywords: risk, risk management, measures to counteract the risk, project work, educational project.

Each project is initiated and implemented in an environment of ambiguity, and a certain risk in achieving its goals is inevitable. Risk can be characterized by: the probability of occurrence (characterized by the expected frequency of occurrence of the risk event and is defined as: very small, small, medium, large or extra-large); potential impact (characterized by the consequences of the occurrence of risk event is defined as critical, acceptable or negligible); degree of exposure to risk (defined as the product of probability and impact of risk occurrence); the frequency of occurrence of the risk event and its relative importance compared with other risk events [4]. [5]. The process of risk management is a series of actions aimed at the identification, analysis, evaluation, response and monitoring of potential risk events or situations that may negatively affect the objectives of the project and provides a reasonable belief that these objectives will be achieved. Risk management is a complex process that proceeds throughout the life cycle of the project and includes the following stages:

Stage One: Identification of risks – a process that specifies the potential sources of risk, and the risks themselves are identified and described. Risk

sources in the context of a project can be: external they result from factors and events specific to the environment in which participants operate (they have economic, social, political or technological nature) and which the project team can not directly influence; internal – they are related to unique features of the project and task types that run in it and are, somewhat, controlled by the project team, for example: conflicting objectives, unclear roles and responsibilities in team, conflicts among stakeholders, poor coordination between the different participants in the project, lack of motivation, turnover in staff, lack of discipline and order. Potential risk factors and events that may affect the timing, costs and outcomes of the project and prevent its realization are revealed. A variety of methods is used for this purpose: questionnaires, interviews, brainstorming, analysis of documents, a list of expected and foreseeable risks based on past experience.

Stage Two: Analysis and assessment of risks – here are explored the parameters of specific risks, their causes, the links between them, the likelihood of their occurrence, frequency of occurrence, and qualitative and quantitative assessments of the consequences of their action. This data is distributed in a table of risk - in it risks are categorized and the probability of their occurrence and their impact on the project are included as well. A sample script has to be prepared and executed in case of risk occur-

rence. Table of risks must be reviewed and reevaluated on a regular basis – it is possible to delete some risks and to develop new ones or to change their evaluation.

Chart 1.

Identified risk	Category of the risk	Probability of risk occurrence	Risk impact	Counteracts to the risk
1. Risk of	internal	medium	Critical	1.1 1.2
2. Risk of	internal	small	negligible	2.1 2.2
3. Risk of	external	large	acceptable	3.1 3.2

Stage Three: Reaction to risks – after we identify risks and assess their likelihood and impact, an appropriate response should be considered – taking preventive measures to avoid or reduce the impact of the risk to acceptable levels. The countermeasures can be directed to reduce the likelihood of risk occurrence, reduce the exposure and limit the size of the expected consequences or to all three simultaneously. The main requirements for counteract risk measures are to be economic, efficient and effective. Counteracting to each risk is associated with relevant strategy [2], [3]: avoidance, acceptance, reduction, and transfer.

The avoidance (elimination) of risk is a strategy that reduces the probability of risk occurrence. Actions that would provoke risk occurrence should be avoided. Also some organizational changes might be needed to eliminate risk. This strategy is applicable when the impact and probability of risk is significant. Certainly, a complete risk avoidance is not possible, and it is not advisable as it limits the possibilities for successful and investment return. What should be done is avoiding solutions and projects that do not meet the stakeholders' interests. Recommended control measures are: eliminating risk sources, change of purpose and termination of the activities.

The acceptance (tolerating) of risk is when nothing can be initiated against risk, and the only option that remains is to it acknowledge and accept it. Its consequences as they come should be accepted as well – the so-called residual risk. Level of residual risks is crucial in determining if one can undertake this risk without further action. Acceptance of risk, without taking special measures for its control is also possible in order to benefit of an abrupt opportunity. Implementation of this strategy is justified only in the case when the impact and likelihood of the risk will be insignificant or when the costs of taking action are disproportionate to the potential benefits of the activity. The recommended control measure is monitoring. These risks need to be monitored – perhaps other internal or external factors affect the likelihood and impact of risk and can move the risk to a higher category.

The reduction (restriction) of risk is the most common strategy because risk can rarely be avoided altogether. In this case, an acceptable alternative is to soften it through mechanisms that will reduce damage to a minimum. Risk is limited to a certain acceptable level within the general requirements to the activity. Possible means to reduce the risk is diversification (including the project in a portfolio of projects) or sharing it with partners. In the public sector the chances to terminate risk are very limited because of the strategic objectives set by government programs. This strategy applies when the impact of the risk-event is low, but the likelihood of its happening is high. The introduction of preventive or remedial control measures is recommended.

The transfer (sharing) of risk is when you consider that the identified risk is too high and losses and negative impacts of its appearance should be reduced. Then the risk is transferred to other organizations in the public or private sector where the organization has established relations. Transfer of risk is "taking responsibility for full or partial compensation of the risk consequences from a specialized institution." [1, 277] Classical ways of risk transfer are insurance, outsourcing and hedging. It is used when the impact of risk event is high and the probability of its occurrence is low. The recommended control measure in this case is transferring risk to a third party.

These actions, including a combination of the reactions of a risk, can be addressed at the same risk. It is necessary to choose the most appropriate response for each identified risk event, given the probability and severity of its consequences. There need to be identified specific actions, responsible people (or units), and deadlines within which there must be a reaction to the risk. Data channels also need to be specified – they will move information between people involved in the establishment of risk events and situations, and those who will decide on taking the measures and actions.

Stage Four: Monitoring – in order to ensure the efficiency of the process of risk management a systematic surveillance (monitoring) is required at every stage. The aim of this process is to observe whether the risk profile (likelihood and impact of identified risks) changes and guarantees that risk management process is effective over time and that necessary steps are made to reduce it. The goal is to minimize risks and achieve objectives threatened by these risks. If necessary, the organization should take further action to reduce residual risk.

The report presents part of the results from working on an educational project related to the ongoing training of kindergarten teachers in the Republic of Bulgaria. This training is realized featuring teachers form Plovdiv University's Pedagogy Department as tutors. The report presents some identified risks of the activity and some specific measures to counteract these risks:

1. Risk of insufficient knowledge or understanding of the objectives.

Counteractions to Risk 1:

1.1 Forming a team of key experts and expert trainers with the necessary professional skills, qualifications and experience able to ensure that the objectives of the project are in accordance with agreed parameters to the highest standards of professional task performance.

1.2 Introducing the team of experts with the objectives and the parameters of the activity. The activity is implemented in an environment characterized by a degree of uncertainty, risk and dynamics. This can cause a sense of insecurity among the performers of the objectives, the credibility of information, the roles, the methods for performance measuring, and the success criteria. Good knowledge and understanding of the objectives and parameters of the activity will ensure commitment of the team to work. When performers are attracted to the planning activities, they will be encouraged to engage with it – people tend to support an activity they have been involved in.

1.3 Through continuous flow of information, education and communication, project participants understand the meaning and logic of the work they are involved in, become aware of the objectives' importance and this modifies their attitude. When people pursue a common, shared goals and have the same attitude, then the possibilities for achieving these goals are limitless. Clear and honest communication is needed throughout the process of the activity – personal discussions with all stakeholders, organization of seminars, joint discussions, creative meetings where they openly share, analyze, and ask questions of interest. To avoid serious problems arising during the project implementation, participants need full information – current, reliable, accurate, and timely. Hiding, filtering or bias provision of incorrect information, deliberately structuring of certain events, opposing parties or groups among themselves are all typical examples of manipulation and an attempt to influence one's behavior.

2. Risk of admission of possible adverse deviations from the activity targets and parameters (time, budget, resources).

Counteractions to Risk 2:

2.1 The activities have to be bound to the goals, the set parameters, the expectations and needs of the users. A periodic briefing on the training organization should be performed – team formation, sourcing of project activities (training materials, schedules of training conduction, deadlines, responsible individuals or units, channels of communication, information that will flow in those channels, and remote consulting implementation). As well as this, the activity needs to be secured with the necessary resources (human, material, financial, informative).

2.2 There needs to be ongoing coordination and close cooperation between all stakeholders in order to synchronize their commitments.

2.3 Effective control of each stage of the activity needs to be exercised for the timely removal of risk sources and deviations from established standards. It is not excluded that other factors can trigger new risk situations or move an already identified risk to another higher category. The aim is to constantly monitor whether the risk profile changes, and if it is necessary to take appropriate further action to reduce risk to an acceptable level and minimize the possible negative effects of its manifestation.

3. Risk of tension and conflict arising between the stakeholders because of contradiction in their interests and expectations.

Counteractions to Risk 3:

3.1 Clear and precise internal rules and procedures need to be defined, regarding the rights, duties and functions of the parties. All team members need to be well aware of their positions, roles, responsibilities and tasks - this will ensure that the necessary discipline and order will help to prevent potential role conflicts, frustration, tension and inner instability and will on other hand guarantee approval, commitment and support by the project participants.

3.2 There has to be comprehensive and most accurate negotiation of contractual relations with all stakeholders. The identifying and understanding the interests, needs and aspirations of the various stakeholders is vital. Since interests of different parties do not always coincide. Certain people focus on satisfying their own interests and completely disregard the interests of the other participants in the activity. All this can lead to dysfunctional behavior in the working process. We should not underestimate the possibility that some interest groups might divert activity from the pre-defined objectives. Detailed, accurate and timely analysis of the causes that can provoke controversy will prevent interpersonal and intergroup conflict.

3.3 Conflicts are inevitable in the life of any organization. It depends on the way a conflict is managed whether its destructive power will appear or its constructive effect. The efficient conflict management in the team involves analysis of the causes that led to their occurrence and identification of their type in order to build the most adequate strategy to address them.

4. Risk of reduced learning process motivation of the participants (trainers and trainees).

Counteractions to Risk 4:

4.1 The team of trainers (Plovdiv University teachers) is highly motivated to participate in such a prestigious project. For them it is a challenge, providing a chance to demonstrate their professionalism in front of an extremely demanding audience which the kindergarten teachers undoubtedly are. On the other hand, participation in the project will extend and enrich trainers' professional knowledge, skills and competencies (as a result of the conducted training of the trainers). It is possible that at some point their motivation will significantly decrease for reasons of various nature (poor awareness, gap with expectations, tension and conflicts within the team). A lack of full commitment to the activity can lead to serious negative repercussions. To prevent such effect it is necessary:

• to work on the creation and maintenance of a suitable environment in which recognition of previous achievements will enhance the search for new, higher occupational success;

• to encourage bravery, creativity and innovativeness of the people;

• to use their ideas, talents, and inspiration in the search of better ways of working;

• to give them full support in order to facilitate their adaptation to the new conditions;

• to provide them with an opportunity to experience some "early wins" – this will increase their support and commitment and will change attitudes towards the activity of some skeptical team players;

• to encourage and reward every achievement, and to recognize people's merit and their contribution to the successful completion of the activity goals.

4.2 Trainees (kindergarten teachers) are generally highly motivated and oriented towards formal, non-formal and informal education, and have experience with different forms of learning. They, naturally, have higher expectations for the proposed education. The opportunity to participate in a certified training program strongly motivates kindergarten teachers. Especially when this program provides the opportunity to acquire new personal, professional and key competences. The received certificates will enrich the professional portfolio of every teacher. And serious commitment of the qualification system with the career development systems and remuneration will undoubtedly further increase the motivation of kindergarten teachers' participation in lifelong learning.

5. Risk of a gap between training target group's real needs.

Counteractions to Risk 5:

5.1 The content of the curriculum needs to be considered with the identified needs, the previous learning and experience of the trainees. So training will be placed in the context of European educational idea of lifelong learning.

5.2 It is very important to orient training towards the target groups' specific needs. Group formation is based on a precise analysis of the educational and qualification structure of the teaching staff. This helps the identification of the teacher's knowledge and skills deficit and the determination of their specific training needs. The successful formation of trainees' groups is a prerequisite for easier adaptation of the training to the actual needs of the members – if the group is large and diverse in composition, it is extremely difficult to adapt the curriculum to the specific needs of each of its members.

5.3 Kindergarten teachers included in the target group will distribute the new knowledge, skills and competencies among their peers, and thus multiply the collective knowledge in the kindergarten as it will eventually become a learning organization. In the learning organization (kindergarten) each teacher improves his/her qualification but s/he also increases the general knowledge.

6. Risk of failure to achieve the required quality of the training activities.

Counteractions to Risk 6:

6.1 There needs to be current scientific content of the training related to the specific requirements of pedagogical practice. The training should be conducted in small groups. This is the most adequate learning environment as it offers more opportunities for decentralized cooperation, more local autonomy and diversity.

6.2 Another counteraction is the use of interactive methods and techniques. Learning in an interactive learning environment has undeniable advantages – it simultaneously forms knowledge and skills, builds attitudes, provoke independent thinking and personal development. But the role of interactivity should not to be absolute – the use of alternative at the expense of traditional didactic instrument can also provoke serious problems and deformities. We will therefore seek a reasonable balance in the didactic instruments used.

6.3 The emphasis is on the learning results, not on the investments, such as its duration. The learning results are defined as an indicator of what a learner knows, understands and is able to do on completion of a learning process. They are specified in three categories: knowledge, skills and competencies. This means that these qualifications in their various combinations cover a wide range of learning results, including theoretical knowledge, practical experience, technical skills and social competence.

6.4 The team of trainers has undoubted practical teaching experience and proven professionalism. The training of trainers will ensure quality implementation of the curriculum. The involvement of professionals in the trainers' training is a prerequisite for achieving high quality of execution of training activities and is oriented towards:

• training in specific skills needed to accomplish the activity;

• training in specific roles by which people are prepared for key leadership roles and positions;

• training in sensitivity, which focuses more on the process than on the content of the training, and is more emotional than theoretical training which leads to improved communication skills; it also leads to confidence building in trainees that they can control their working behavior, occupy leadership positions, and cope with any challenge of the real working environment;

• motivational training that will inspire trainees to achieve their utmost potential; it will help them demonstrate a flexible and higher standards of operation performance and achieve the necessary motivation.

6.5 The trainers' team members should maintain open communication relations between each other. Regular meetings (briefings) need to be organized and conducted so that trainers exchange experiences, impressions, recommendations regarding the sources of risk and seeking solutions to minimize them.

6.6 There also needs to be internal restructuring of the activities. There are mechanisms assessing the quality and effectiveness of training on the basis of permanent feedback. If necessary, some trainers who do not meet the accepted requirements and do not achieve the required quality of implementation of training activities will be removed. They will be replaced with other trainers whose experience and qualifications is equivalent to these of the originally selected. For this purpose there will be suitable training conducted to the backup team.

7. Risk of shortening the length of the training due to the late start of the activity. The subtle difference between the start and the finale of the project generally accepts diversions of the initial baselines.

Counteractions to Risk 7:

7.1 A curriculum needs to be developed on schedule. This also applies for the trainees' set of training materials and their electronic versions.

7.2 Flexible schedules for organizing and conducting the training have to be created. There also has to be adequate reaction of coping with sudden acute risk events of different nature. The training of trainers allows interchangeability of the training teams. They have the attitude to prioritize their commitments so as to respond quickly and appropriately when necessary.

7.3 The action plan is reviewed in accordance with any new information appearing (change of some of the terms or set parameters, errors in the interpretation of relationships between factors affecting implementation of the activity).

The parameters set for the volume of the report allow inclusion of only a small portion of the identified risks and measures to counteract, and require them to be presented descriptively in the textual version, not in a table of risks (as in the original).

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Аннотация: "Управление риском в контексте проектной деятельности в образовании", гл. асс. Бойкова Красимира, Болгария, Пловдивский университет имени Паисия Хилендарского. Каждый проект инициируется и реализуется в условиях некоторой неопределенности, и риск достижения его целей неизбежен. Этим риском нужно управлять. Процесс управления риском есть последовательность действий, направленных

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на идентифицирование, анализ, оценку, реакцию и контроль потенциальных рисковых событий или ситуаций, которые могут повлиять негативно на достижение целей проекта, и обеспечивает разумную уверенность, что эти цели будут достигнуты. В представленном докладе указаны различные подходы, процедуры и методы управления риском в проектной деятельности. Очерчены основные характеристики риска, а также возможные источники риска: внутренние и внешние. Управление риском рассмотрено как сложный, непрерывный и многоаспектный процесс, протекающий в течение всего жизненного цикла проекта и проходящий через различные этапы: идентифицирование риска, анализ и оценку риска, принятие превентивных мер для предотвращения или уменьшения влияния риска до приемлемых уровней, мониторинг (контроль) риска. Представлены и некоторые из наиболее популярых стратегий противодействия риску – избежание (элиминирование) риска, принятие (толерирование) риска, уменьшение (редуцирование, ограниченге) риска и переведение (трансфер, разделение) риска. Вторая часть доклада посвящена результатам работы по идентифицированию потенциальных рисков при реализации образовательного проекта, связанного с продолжающимся обучением учителей детей дошкольного возраста на территории Республики Болгарии, в котором в качестве обучителей заняты преподаватели Педагогического факультета ПУ им. Паисия Хилендарского. Представлены и некоторые конкретные меры противодействия идентифицированным рискам леятельности.

Ключевые слова: риск, управление риском, меры противодействия риску, проектная деятельность, образовательный проект.