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Risk Management of an Education Project

Ilnar F. Yarullin
Kazan (Volga region) Federal University, Kazan, RUSSIA.
Aleksey E. Prichinin
Udmurt State University, Izhevsk, RUSSIA.
Dilbar Y. Sharipova
Tajik State Pedagogical University named after Sadriddin Aini, Dushanbe, TADZHIKISTAN.

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The urgency of the problem stated in the article is stipulated by the fact that the organizational and methodical conditions of effective education projects risk management being adequate to the current stage of the society development are not developed perfectly. It is related to the fact that the circumstances actualizing the concept of "risk" in the modern educational environment is as a rule neglected and instead of it is used only its economic component, which results in effectiveness reduction. The purpose of the present article is the identification of the circumstances, actualizing the concept of "risk" in the modern educational environment and formulation of organizational and methodological conditions for effective risk management of educational projects. The leading approach to the study of this problem is systematization that allows to consider the problem as a whole system necessary for effective risk management of educational projects. The present article identifies the circumstances actualizing study of the "risk" phenomenon in the modern educational environment, formulates the basic contradiction in the study of the risks of educational projects and formulates organizational and methodical conditions of effective risk management of education projects. Organizational and methodical conditions of the effective risk management of educational projects are designated for creating a more efficient models and practices of risk management of the educational project. They may be useful in the sphere of educational employees who design, plan, implement, monitor and evaluate educational projects of different levels.

Keywords: risk of education projects, the relevance of risk management of education projects, organizational and methodical conditions, effective risk management of education projects.

INTRODUCTION

The necessity of observation of risks of the educational environment and, in particular, risk of education projects is motivated not only by the logic of development of the scientific knowledge, but also by the effects of already implemented educational projects. Therefore, in the late XIX - early XX century, legal, mathematical and economic sciences have begun to explore the phenomenon of "risk." This process is characterized by the accumulation of scientific knowledge

Correspondence: Aleksey E. Prichinin,
Udmurt State University, Universitetskaya, 1, Izhevsk, 426034, RUSSIA.
E-mail: aleksej-prichinin@yandex.ru.
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about the probabilistic nature of natural and social processes, the development of special sections of mathematics and logic, the need to develop rules and regulations governing the practice of insurance and stock exchange transactions (Knight, 2003). Later such the phenomenon as "risk" becomes the object of study of game theory, as well as theory of probability, psychology, economics, medicine, law and other disciplines (Neumann, 1961). During subsequent years, risk turns into an object of interdisciplinary research and acquires the status of scientific concept growing out of a separate discipline (Algin, 1989). Now there comes a point when it is necessary to pay special attention to risks in the educational environment, which is stipulated by the effects of ever-increasing educational activities. The structure, content and methods of risk management in the education system are currently the subject of research of many scientists (Prichinin, 2014; Valeeva & Valeeva, 2013; Gafurov & Kalimullin 2015). At the same time, organizational and methodical conditions of the effective risk management of education projects being adequate to the current stage of development of the society have not been developed perfectly. The analysis showed that the organizational and methodological terms of risk management of education projects are neglected (Prichinin, 2012). Therefore, identification of organizational and methodological conditions for effective risk management of educational projects is not less important than the creation of the system of risk management itself. If most of the practices are concerned about the specific methods of identification and ways to minimize the above mentioned risks, scientists are mostly interested in the system of knowledge and the corresponding activities that study, explain and justify the risks in the education, their principles (Prichinin, 2014), patterns (Prichinin, 2013), special aspects, conceptual apparatus, limits of applicability, etc. The risk management system of educational projects is a multidisciplinary field of research at the intersection of philosophy, psychology, pedagogy, sociology, management theory, economics, probability theory, and others. We refer risk management of education projects to the problems of innovation in the field of education, i.e. to the educational innovation (Ovechkin and Prichinin, 2012).

METHODOLOGICAL FRAMEWORK

Research methods

The leading approach to the study of this problem is a systematic approach that provide a means of consideration the problem as a whole system necessary for the effectively construction of a risk management model of educational projects on its base. The study used the following methods: analysis, method of mental experiment, forecasting, ordering and summarizing of facts and concepts, modeling and design.

Research stages

The study was carried out in three stages:

- In the first (preparatory) stage the current state of theory and practice of the studied problems in the humanities and natural sciences industries was elaborately analyzed;
- It the second (basic) stage organizational and methodical conditions of effective risk management of educational projects were revealed;
- The third stage and the final stage carried out systematization, interpretation and synthesis of the research results, elaboration of theoretical conclusions and registration of the results.

RESULTS

Being revealed are the following facts actualizing the concept of "risk" in the modern educational environment (Prichinin, 2013):

The number of high-risk projects in the field of education is constantly increasing. The society do spend more and more manpower and resources to create and maintain in operable state elements of the educational environment. The increasing diversity of educational projects that make up the educational environment requires not only increasing of human, material, information and energy resources to create them, but even more costs to maintain these projects in a healthy state, their service and overcoming the consequences of their functioning. Increasing of size and complexity of the project results in increasing of cost for its existence. The result is not always adequate to the costs and effects, because the major part of them is to be spending to service the said projects.

If the alteration dynamics of the industrial society was provided mainly by extensive production activities then in conditions of postindustrial society the alteration dynamics is provided by the project activity that substantially alters the amount and structure of the potential risks of the educational system. Stability of the education system under the conditions of information determinism can be achieved by the readiness of the object of an educational project for accelerated identification and elimination of constantly arising educational, social, technological, environmental and other risks due to its possession of design technology. This, in its turn, can be provided by an education system focused on the formation of a self-developing, self-defined personality, capable to identify and predict possible risks, to minimize them and to build their own scenarios of life (subject of evolution). So indispensable is the education paradigm enabling for the participants of the educational project not only to absorb and retain information and use the ready algorithms to solve the existing problems, but above all, prepare them for identification of unknown risks (risk identification), discovering of information for their decisions, evaluation of alternatives, creation of more productive ideas and develop solutions to solve complicated dilemmas.

Inattention to institutionalization of risk-reflection in the education system, that is, to the need to spend an increasing part of the material and intellectual resources for the identification and management of risks, understood as normative value controller embedded in the educational project intended for limiting its risk- taking and lack of professional pedagogical culture of risk -reflection.

Boundary-spanning between social norm and pathology, reconciliation with education risks as necessary part of education, makes risk an integral feature of modern education project. We can say that it is impossible to have "zero risk" in any educational project. Almost any control action in the education system is risk-taking.

Due to the expansive nature of educational activities there is a consistent trend towards the integration of cultures and formation of common world-wide culture, i.e. globalization, when education projects continue to expand rapidly, turning into a global planetary structure. Educational projects at that overflow the borders of states and acquire general civilization scope, affecting more and more people), towards building of a unified system of values, meanings, objectives, forms and rules of relationships and behaviors and creation of a unified style of life and activity. It is material, energy, financial and information expansion, and, in the whole cultural expansion of people inhabiting the planet in relation to each other. Globalization and standardization of cultural and historical educational space leads to a reduction in cultural diversity, destroying the established meanings, norms and values. At the same time, educational systems that carry the "national" traits are considered as

"souvenir", which indicates a decrease in cultural diversity and the loss of identity of some (and perhaps most) people.

Extension of the educational environment leads not only to improvement of the quality of life. People are increasingly feel discomfort and inconvenience because they have to live in accordance with schedules of the existing educational systems. The impact of educational activities leads to the emergence of new (mental, physical, behavioral) abnormalities and diseases. At the same time, the biological capacity of the human body and psyche to adapt is limited, and keeps pace with changes in the educational environment. The psychological structure of personality has been changed - uncertainty, fear, confusion, loss of will and conceptual guidelines, recession in the virtual irrational world n, or, vice versa, aggression, - all this in any case, is a way to escape from not transformed into a rational sphere of consciousness problems and contradictions of the educational environment.

Significant expansion of the information environment potential and its influence on human life, accelerating pace of life and change in the environment results in relative decrease in the importance and contribution of the educational system in the formation of the student's personality. The amount of the information that he or she receives outside the educational institution increases; familiarizing to cultural values and the values themselves are determined, above all, by social and technological environment.

Extension of the educational environment determined the expansion of areas of pedagogy and increased scientific knowledge, the transformation of ignorance into knowledge, unexplored into presentative, unrealized into realized led to increase not only of knowledge volume (which continues increasing), but also of the knowledge structure, their relations, interpenetration and interdependence. Single person and society in the whole feel significant difficulties in the development of this experience, of knowledge and its structure. Along with the increase of knowledge and changes in its structure will inevitably multiply the problems and contradictions as inside knowledge so in reality.

The educational environment is becoming a complex system, which is characterized by the low level of predictability and manageability. Any exposure to obtain better results often lead to the opposite effect. A person is in a state of uncertainty between the desire to secure the existence and inability to ensure the reliability because of the unpredictable results.

"The latency of educational risk" – peculiarity an educational project risks is their "invisibility". Many of the educational risks cannot be perceived by the senses of a person and difficult mathematical calculation. The inaccessibility of many educational risks to everyday knowledge feeds the illusion of an absence of danger.

"Expectancy" – one of the features of educational projects is that the risks manifest themselves in a several years (insufficient consideration during the development phase of the educational project of the principle of "advance of the reality").

System backlog of educational content on the actual state of the existing areas of knowledge.

Growing contradiction between the modern requirements to the manifestation of creative activity of the subject and subject's lack of readiness to identify problems, contradictions and tasks (Prichinin, 2008).

Spontaneity, locality, ambiguity and unpredictability of the results; their total dependence on the individual student, the individual features of students and features of academic staff. And also presence of various and diverse methods that demonstrate their effectiveness only in the hands of a teacher or a master; weak technological and technical equipment of a teacher in terms of accelerating the development of information and communication technologies.

The transition from reproductive to a productive, from technocratic to the cultural and technological education, from industrial to post-industrial stage of development of society;

Automation and computerization of modern industrial production, and gradual replacement of human by automated apparatus; person's escape from the scope of the direct transformation of matter and energy to the level of management and creative activities; growing irreproducibility of the benefits - the desire for self-realization and personal growth; substitution of the doctrine "education - teaching" for the doctrine "education - creation."

Most of introduced today at the Russian school innovations are imported, and import is carried out at all the levels of the education system. At that adaptation of the said innovations to peculiarities of modern Russian education (such as two-tier system of education, tutoring, credit - modular technology, the Mark - rating system of evaluation, a single state exam, "per capita" funding, the transition to an autonomous educational institutions, project method, competence approach, distance learning and many others) is often absent (Ovechkin and Prichinin, 2012).

The increasing number of people willing to learn, increasing public demand for education quality.

The amount of information produced by science is constantly growing and today there is an urgent problem - its assessment (identification) by the society, particularly it concerns the education system. Nowadays society as a whole cannot fulfill this task, because it has not opportunity to evaluate this data volume. That is why the mechanism of evaluation moves to the next level - namely, from the spheres of social life (social) to the fuild of private life (building of a personal cultural field). The criterion for the evaluation of information becomes increasingly personal assessment of what is happening with every single person, in contrast to the former public evaluation. On this basis, the attitude of society as a whole to a new or any other information is as a rule more controversial, which imposes additional responsibility for making decisions. The competence of the individual to identify meaningful tasks and problems significantly increases as problems encountered - that is information being systematized, processed and evaluated (generalized from spatial, temporal and world outlook point of view).

The interaction between the educational environment, human, science, technosphere and the natural world continues to automate. At that the educational environment on the one hand acts as an information buffer between man, science, techno sphere and the natural world, and on the other hand is a subject to the impact of human science, techno sphere and the natural world. Since the amount of information transmitted between the educational environment, science, human and technological environment is constantly increasing, there is a problem of its high-quality and efficient transmission without distortion) to the recipient. Taking into account the fact that the recipient is that every member of the society, there is a problem to transfer this information to everyone, despite the fact that each person needs its individual way of transmission. Thus, the original information distorts, and the result is an inadequate perception and judgment.

In the industrial society the information transmission scheme, which has remained essentially unchanged from the traditional society ceases to satisfy the society because the education system as one of the main mechanisms for information transfer, has ceased to serve as a source of valuable information. Students get most valuable information not through the education system (Vedishenkova, Efimova & Ryabova, 2015). We have this situation because in the traditional and industrial formations principle of education is generally the same, difference consists in amount of information to transmit. Due to exponential increase of information amount and limited capacity of the transmitting channel, information comes from the other sources and continue to distort. The situation

with transmission of valuable and new information to students is the following: on the one hand it is delayed (by the education system), and on the other hand, it is greatly distorted (by the other sources). As a result, students fail to assess reality adequately. Therefore, the education system should adequately respond to this situation, because any delay in the reflection by the education system of the new knowledge leads to an increase of such delay in future (Nasibullov, Kashapova & Shavaliyeva, 2015; Ivanov et al., 2015; Telegina, Galimova & Masalimova, 2015).

The system of evaluation of the quality of education is changing with the development of formations: the archaic formation in the quality of education was evaluated directly in the natural environment, in the traditional formation quality of education is estimated by the system of education. The formation of the industrial quality of education is assessed as well as in the traditional (inertia), although such an approach at this stage itself is not justified, because the quality of education, regardless of its evaluation system of education is evaluated by society, science and technological environment. And second evaluation is more objective.

The educational environment is dynamic and changeable. Its composition, structure and nature of its impact on a person changes several times within a single generation. Cultural-activity experience of previous generations becomes unclaimed. Moreover, every person is forced to readapt to the real educational reality several times. The dynamic education environment is also evident in the social life of the community, change the parameters of the individual style (culture), targets, methods, knowledge, activities and relationships with other people. Each new generation in the modern world is experiencing great difficulties in the process of adaptation to the real educational environment.

Rights to the results of innovative educational activities belong to anybody else except a developer (institutional signals encouraging innovation are absent-generally, institutional medium in our country is neutral in its attitude towards innovation in the educational sphere). Innovative teaching product immediately alienated from the author and became the public domain. Further, this product is used, as a rule, randomly and not in correspondence with its purpose (the author's intention), which increases the risks of the said educational project.

Lack of interaction of the subjects of pedagogical innovation and as consequence, the responsibility is valid only within a particular functional entity. Subjects of teaching activities are consistent with their views and ideas, that is, subjective and do not involve a single metaidea (concept, theory, ideology).

Closure of the educational environment on its own assessment of the effectiveness of the (liability is limited to the internal criteria and parameters to use the educational system). In this regard, there is no liability of the pedagogical process for the final results of its educational activities (social responsibility).

In the minds of most subjects of pedagogical innovations dominates the linear model of innovation diagram (cause - effect, Determination model) - from basic research to the applied research and experimental implementation of work/ It was effective during the industrial economy.

Underdevelopment of innovation theory, mechanisms of innovation management of educational institutions, infrastructure and innovations in the field of teaching, which significantly blocks the development of innovation because of the high risk is not able to attract significant resources and have a realistic assessment of a particular pedagogical innovation.

In the pedagogical field risk tolerance in the terms of innovative development is not sufficiently well defined. The degree of risk each subject of pedagogical innovations defines independently, which creates a huge polyphony and decreases the degree of innovation in the educational environment.

Lack of research of risks in education projects in pedagogical innovations (Prichinin, 2009).

There are also other circumstances, actualizing the concept of "risk" in the education system. All of them are either directly the cause of the risk, or act as catalysts. So, globalization and unification of the educational environment leads to a massive import of pedagogical ideas and to confront of educational systems, and approaches to conflicts within the culture. Extensive educational activities (goal by any means) results in political, social, economic and other issues and conflicts; a high level of education systems in the developed world leads to their economic and political expansion, which causes dissatisfaction of developing countries. Transformation of human into a functional element of "educational megamachine" and the inability of a person to realize their individual potential is the cause of many conflicts. Commitment to stabilize its position by expanding and improving of the educational environment turns in uncertain future because of its unpredictability; and, finally, the desire of people to live better and have more leads to an increase of "educational pressure" on the person, and this reduces the quality of life (almost all “profit” is to be spent on psychological and physical recovery of the person).

Thus, the result of educational activities is accompanied by the inevitable (valid or unwanted) accompanying the results - consequences. These effects usually are not its purpose and relate it to the attendant and inevitable results. Modern social and economic situation requires the national education system of constant change. Number of high-risk projects in the field of education is increasing. It is important to pay attention to those involved in innovative educational activities for the consequences that may occur in this case, in order to innovative development in the field of education is carried out rapidly and steadily. Consequence management is an important component in ensuring the success of any project, including education. Moreover, the identification and management of risks in education is an essential element of innovation, as the consequences and losses in the event of a risk in this area could be significant. However, in modern pedagogical science and practice neglected the identification and management of risks arising in the process of innovative educational activities - are not developed mechanisms to identify and analyze the risks at various levels of educational projects, while the impact of these effects significantly. Management of innovative educational projects should include the identification and management of risk, prevent or minimize their adverse impacts, and the use of acceptable consequences in order to achieve more effective results. Consequences of innovative pedagogical activities are due to the realized risk. An increasing number of people in the education system is involved in the creation and management of innovative projects. However, most of them do not have sufficient experience in risk management and the consequences that accompany any innovative educational project. The impact of risk events significantly reduces the efficiency of the educational project, or even causes it to crash as a result of having a lot of unintended consequences. The process of risk management and the impact of innovative educational activity - one of the components of the concept of the innovation process and its objectives - reduce the impact of unforeseen events on the project and increase the efficiency of decision-making.

The main controversy lies in the fact that the modern educational environment is undergoing significant change, number of developed and implemented educational projects is constantly increasing, while, risks of educational projects are not identified at their development and launch. The result is a significant reduction in the effectiveness of educational innovations.

• social and pedagogical level shows a contradiction between society's demand for sustainable projected development of the educational environment and the increasing uncertainty of the education system development and educational projects implemented it in;

• for scientific and pedagogical level a contradiction has been revealed between the existing level of teaching as a science and inadequate attention to the theoretical and methodological foundations, models of risk identification and management of educational projects;

• as for scientific and practical level, there is a contradiction between the increasing number of educational projects and their risks, as well as insufficient development of mechanisms intended to identify and minimize the risks of educational projects.

Identified are the following organizational and methodical conditions of effective risk management of educational project:

1. Management of any educational project will include risk management subsystem of the educational project as its basic component;

2. The risk management process will take into account the laws of development of educational projects (Prichinin, 2013);

3. The risk management subsystem will be used in all stages of design and implementation of the educational project;

4. Risk management subsystem of educational projects will include the following interrelated components: coordination of risk management of education projects, algorithms of identification and risk analysis of educational projects, bank of methodological information (archive projects patterns of educational projects, the catalog of risks, methods of risk identification, risk analysis methods, techniques of risk management, catalogs of risk factors and forward-looking information), evaluation of the acceptability of risk, choice of methods and options to minimize risks of the educational project;

5. As part of risk management subsystem of the educational project will be used an algorithm to identify and analyze the risks of educational projects, including the following components: an analysis of the grounds for identifying the risks of educational projects; collection and analysis of factual material about the educational project; identification and analysis of the external and internal risk factors of educational projects; classification of the educational project (its identity) and the definition of its typical risks; identification and analysis of risks of non-standard educational project; evaluation of the identified risks of educational projects (Prichinin and Prichinina, 2013);

6. In the process of risk management of education projects will be developed and used algorithms and schemes of educational projects (Prichinin, 2013) minimizing risks;

7. The choice of methods of risk management of education projects will be based on real factors of external and internal environment of educational projects and status of the educational projects;

8. The choice of methods for risk analysis of the educational project will be based on the actual phase of the educational project;

9. Risk management of the educational project will be more effective, if the process of its identifying, analyzing and managing starts as early as possible;

10. The process of identification, risk analysis and management of the educational project will return to the initial stages of the educational project (to make iteration) (Prichinin, 2013);

11. In the process of identification, risk analysis and management of the educational project will be used constantly updatable database including: the archive projects patterns of educational projects, the catalog of standard and unique risks, methods of risk identification, methods of risk analysis, methods of risk management of educational projects, the catalog of factors of risk and forward-looking information;

12. At evaluation of the acceptability of risk will be taken into account the principle of "pre-emption of reality." Responding to the educational system under

conditions of risk and uncertainty should be not "catch up", but "proactive" (leading). The education system must act proactively; only under these conditions, it will provide a balance with the requirements of the economy. Long-term outcomes of the education system involves its prediction based on pre-emption. The nature and value of pre-emption teaching depends on many factors. It is evident, that, in contrast to the classical education formed in the era of industrial civilization, post-classical education must be forward-looking and be ahead of transformative human activity. It must not just anticipate and predict, but also to give even under conditions of risk and uncertainty necessary pre-emptive - "enabling" and "limiting" - recommendations even under conditions of risk and uncertainty (Prichinin, 2012).

DISCUSSIONS

The modern social and economic situation demands continuous changes from the system of domestic education (Zhirnova & Absalyamova, 2013). The number of high-risk projects in the field of education constantly increases. Thus, it is very important to attract attention of authorities engaged in innovative educational activity on after-effect, which can appear, in order innovative development in the field of education will be fulfilled dynamically and progressively. Management of after-effects is one of important components in ensuring success to any project, including educational. Moreover, identification and risk management in education is a necessary element of innovative activity, because after-effects and losses in case of risks realization in this area can be essential. However, in modern pedagogical science and practice the insufficient attention is paid to identification and to risk management, arising in the course of innovative educational activity - mechanisms of identification and risk analysis at the different levels of implementation of educational projects, are not developed, while influence of such effects are sufficient. Management of innovative educational projects has to include identification and risk management, prevention or minimization of their adverse effects, and, besides, usage of admissible after-effects for achievement of more effective result (Galimov, Makhanko & Kashapov, 2013). After-effects of innovative pedagogical activity appear as risks realization. The increasing number of people in the education system is involved in processes of creation and management of innovative projects. However, the most of them have no adequate experience of risk management and after-effects which accompany any innovative educational project. Influence of risk events significantly reduces efficiency of the educational project or even leads it to crash, because of arising of big number of unforeseen effects. The previous researches were conducted by A.P. Pankrukhin (1995), covering methodical basics and the principles of the organization of processes of management of risks in education, O. I. Chubarova (2005) considering educational risk as economic category, N. V. Tangalycheva (2012) considering risks of educational institution at introduction of standards of the new generation and a way of their minimization, E.F. Saburov (2007) studying risks of investments of corporate and private investors in education and many others. Nevertheless, the analysis of the scientific works devoted to a problem of identification of organizational and methodical conditions of effective risk management of the educational projects showed that they have only debatable character and the quantity of the works is insufficient.

CONCLUSION

In the process of research have been revealed a number of circumstances, actualizing the concept of "risk" in the modern educational environment and formulated organizational and methodical conditions of effective risk management of education projects. Among the most important conditions for the establishment

and implementation of the educational project there is inclusion of subsistem of risk management as a basic component of the educational project taking into account identified patterns of including of innovations in education. Subsystem of risk management of educational projects include the following interrelated components: coordination of decision-making concerning risks at creation of educational projects; ability to identify and analyze the implications and risks of the educational project; bank of methodological information (archive projects, laws concerning creating of educational projects, methods for identifying impacts and risks, methods of risk analysis, methods of risk management of educational projects, the catalog of the risk factors and forward-looking information); evaluation of the acceptability of risk; criteria and methods of algorithm selection algorithm and options to minimize the risks of the educational project.

Organizational and methodical conditions of effective risk management of educational projects aimed at creating more efficient risk management models can be useful to employees of the educational sphere, who design, plan, implement, monitor and evaluate educational projects of different levels.

Organizational and methodical conditions of effective risk management of education projects creates conditions for constructing of an appropriate model and suggest the following tasks:

- Definition and specification of the status, nature and trends of development and implementation of risk in educational projects;
- Identification of key personal and socio-cultural qualities of the person as a subject of educational activities to ensure its stability and the stability of society in the terms of risk;
- The definition and specification of the basic parameters and criteria for risk assessment in the educational project and its sub-systems, reflecting the degree of matching the results achieved to the needs of innovative society;
- Identification of conditions and development of models for modernization (transformation) of value-targets, the content of education, educational technologies, monitoring and management of education in view of the risk;
- Studying the possibility, necessity and sufficiency (completeness) of theoretical and methodological foundations of risk management systems and education projects to determine the conditions of its practical implementation in the current educational practice;
- Development of projects of basic educational programs that take into account the formation of competence in the field of risk management of education projects.

The essential result of revealing the organizational and teaching conditions for effective risk management of education project, and construction of appropriate models based on them can be more effective implementation of educational projects in practice.

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