

Abstract

of the dissertation of Kayumova Maya Sairanovna
on the topic “Formation of the students’ research competencies in the process of
Start-up projects planning”
submitted for the degree of Doctor of Philosophy (PhD) in the specialty 6D010300 –
Pedagogy and Psychology

The relevance of research. In the modern world, there are more and more requirements for higher education. Modern society needs university graduates who have not only knowledge and competencies in their professional field, but are also more flexible, capable of creative thinking. It is also important to have the ability to anticipate, analyze, make assumptions based on reliable information, set goals correctly, determine tasks for their implementation. All this is possible if a university graduate has research competencies that sufficiently contribute to solving the problem of professional training of effective managers in all areas, in particular, in the field of creation and implementation of Start-up projects.

The study of student Start-up projects showed that the problems of future entrepreneurs begin at the very first steps, namely, from the moment of planning, which confirms the assumption that the availability of the necessary competencies, in particular research, could create conditions for future successful entrepreneurial activity. Mistakes at the first stage of activity create a situation of unwillingness to move on, perhaps for this reason many Start-up projects freeze in their development. It was the solution of these problems that pushed us to the idea of studying the process of forming students’ research competencies in the planning of Start-up projects.

The review of scientific literature testifies to the multidimensional coverage of the problems of the development of research competencies in vocational education. The projects were written by J. Dewey, S. Frenet and others, having justified in their works the need to develop students’ research skills. We are close to the works of A.A. Gubaidullin, who considered the formation of students’ research competence in the conditions of project-based learning, D.I. Mukhatayeva, who studied the socio-pedagogical support of the process of forming students’ project competence in the university education system.

However, despite the increased attention of foreign and Kazakhstani scientists to the problems of the development of research competencies, to the didactic aspects of their development, the scientific foundations of this process for students have not yet received proper coverage in the scientific literature, there is not enough research on the development of research competencies of students in the process of writing Start-up projects, whereas this is very relevant in modern education.

The above made it possible to draw conclusions that the objective prerequisites for the study of this problem in modern conditions are a number of existing contradictions:

– between the existing level of professional training in higher education and the need to form a personality with research competencies, capable of independent scientific research;

– between the objective need for the formation of students’ research competencies in the process of planning Start-up projects and the lack of knowledge of this area of research in the theory and practice of modern higher education;

– between the need to prepare students for planning Start-up projects and the insufficient orientation of educational programs of higher educational institutions to the implementation of the process of formation of research competencies during training.

The revealed contradictions caused the problem and the choice of the research topic: “Formation of the students’ research competencies in the process of Start-up projects planning”.

The purpose of the study is the theoretical justification and experimental verification of the theoretical model of the formation of research competencies of students involved in the planning of startup projects.

Object of research is the process of planning Start-up projects.

Subject of research is the formation of students’ research competencies in the process of planning Start-up projects.

Research hypothesis: if in the formation of students’ research competencies necessary for planning Start-up projects, to study their theoretical foundations, **then** this will reveal the necessary conditions for the development of the desired competencies, **since** in this case the integrity, content and consistency of this process will be ensured.

Research objectives:

1. To identify the theoretical foundations of the formation of research competencies.

2. To clarify the concept of “Start-up project”, justify its use in vocational education of students and determine the scientific basis for planning a Start-up project.

3. To define the concept of “research competencies” necessary for planning Start-up projects, define criteria and indicators of their formation.

4. To reveal the essence of pedagogical conditions for the formation of students’ research competencies.

5. To develop a theoretical model for the formation of students’ research competencies in the process of planning Start-up projects.

6. To test the effectiveness of the developed theoretical model for the formation of students’ research competencies in the planning process of Start-up projects.

The theoretical basis of the research is the theories of the competence approach (E.D. Bozhovich, N. Chomsky, J.C. Raven, S. Taber, I.A. Zimnaya, K.T. Kozhakhmet, N.V. Mirza, A.K. Mynbaeva, R.Sh. Abitaeva, S.A. Uzakova, etc.), personal-activity and system approaches (L.S. Vygotsky, A.N. Leontiev, etc.), step-by-step preparation of projects (E.S. Polat, M.Y. Bukharkina, V.V. Pak, etc.), conditions for the use of projects in training (L.A. Baidurova, T.V. Shaposhnikova, Sh. Taubaeva, D.I. Mukhataeva, etc.), development of youth entrepreneurship (D. Ramos, M.J. Madeira, S.R. Shams), philosophical concepts of personality development (Z. Freud, A. Adler).

Research methods: theoretical methods of scientific cognition were used to achieve the goal and solve the tasks set in the study: direct and indirect types of pedagogical observations, psychological and educational testing, methods of problem research, analysis, synthesis, induction, deduction, syllogism, modeling, pedagogical experiment were carried out at different stages of the study, mathematical methods of data processing were used (ranking, qualitative and quantitative analysis of statistical data, statistical data processing according to the SPSS23.0 program, the Cronbach's alpha coefficient).

Scientific originality of the dissertation:

– the theoretical foundations of the formation of research competencies are revealed;

– based on the analysis of the literature on the research topic, the concept of “Start-up project” has been clarified, its use in vocational education of students has been justified and the scientific basis for planning a Start-up project has been determined;

– the definition of the concept of “research competencies” is given, the research competencies necessary for planning Start-up projects are identified; criteria and indicators of their formation are determined;

– the pedagogical conditions for the formation of research competencies have been clarified: a special course “Preparation for planning Start-up”, a module of lecture and practical tasks in the course “Pedagogy of higher education” and the MOOC “Start your Startup” have been developed;

– a theoretical model has been developed for the formation of students' research competencies in the process of planning Start-up projects;

– scientific and theoretical conclusions are substantiated and the effectiveness of the theoretical model implemented on the basis of the proposed pedagogical conditions for the formation of the desired competencies of students in the planning of Start-up projects is practically proved.

The theoretical significance of the study:

– the theoretical foundations of the formation of research competencies are substantiated;

– the concept of “Start-up project” has been clarified, its use in professional education has been justified;

– the definition of the concept of “research competencies” is given, the research competencies necessary for planning Start-up projects are identified;

– the theoretical model of the formation of research competencies has been developed.

The practical significance of the research lies in the fact that the following have been developed and implemented in the educational process:

– a special course “Preparation for planning Start-up”;

– an electronic textbook “Preparation for planning Start-up” for a course for aspiring entrepreneurs” (certificate No. 12731 dated October 21, 2020) has been developed;

– module of lectures and practical tasks in the course “Pedagogy of higher education”;

– MOOC “Start your Startup”.

These pedagogical conditions can be applied not only in higher education, but also in non-formal adult education.

Approbation and implementation of the main provisions of the dissertation and research results were carried out in the course of scientific research, presented:

– at international conferences in Moscow, 2019; Nizhny Novgorod, 2020; Pavlodar, 2020; Nizhny Novgorod, 2022;

– in scientific journals recommended by the Committee for Quality Assurance in the Field of Education and Science of the Republic of Kazakhstan: Bulletin of Toraigyrov University (pedagogical series), 2019, 2020, Bulletin of L.N. Gumilev ENU (pedagogical series), 2021;

– publications in the journal of the Higher Attestation Commission of Russia “Modern pedagogical education”, Moscow, 2022;

– publication in an international journal with a non-zero impact factor included in the Scopus information base – World Journal on Educational Technology – 1 publication.

Provisions to be defended:

1. Theoretical foundations of the formation of research competencies; justification of the use of the concept of “Start-up project” in the professional education of students and scientific foundations of planning a Start-up project.

2. Research competencies as a set of informational, analytical, interdisciplinary and innovative competencies required when planning Start-up projects, criteria and indicators of their formation, which are presented in value-motivational, content components and Soft-skills.

3. Pedagogical conditions for the formation of students’ research competencies.

4. Theoretical model of formation of students’ research competencies in the process of planning Start-up projects.

5. Scientific and theoretical conclusions of the effectiveness of the theoretical model based on the proposed pedagogical conditions for the development of the desired competencies of students working on planning Start-up projects.

The structure of the dissertation: the dissertation consists of an introduction, three sections, a conclusion, bibliography and appendices.