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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

**THEME: INNOVATIVE MANAGEMENT OF THE
COLLEGES WITH PEDAGOGICAL PROFILE AND ITS
INFLUENCE ON QUALITY OF TEACHING**

Speciality: 5802.01 – Organization and planning
of education

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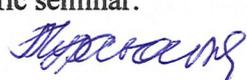
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GENERAL CHARACTERISTICS OF THE RESEARCH

Relevance and degree of scrutiny of the topic. Thanks to emergence and development of innovations in the last decades of 20th century and their continuity up today, there are established some fundamental changes in the socio-economic life of society. As in other fields, also, in the sphere of education, shifting these alterations into the mode of quality, their much deeper penetration into the students' and teachers' creative activity have already become mandatory. By their state of nature, pedagogical innovations are regarded as a corestone for all changes.

In the "Law on Education", Article on 21.1 on the Secondary Special Education Institutions in the Republic of Azerbaijan it is stated that, "*Secondary Special Education, by the market requirements, provides the preaparion of specialists on various fields of activities on the bases of general and full education*".¹

Some recently adopted decisons and orders by the Government of Azerbaijan and Ministry of Education provide substantial grounds stimulating the improvements in the the field of management of colleges for their future development. For example, the Resolution dated to April 17, 2020 no 140 by the Republic of Azerbaijan renewed the list of classification of specialities relevant to these institutions since 2010 that it was in the force, and prepared the new classification to conform to the new demands of modernity. Starting form 2019, it was also prepared the the new admission rules for the graduates of these institutions to enter the higher educational institutions without examinations.

As a whole, the following official documents establish the sound legislative-normative prerequisites for the development of colleges in Azerbaijan.

Nowadays the expected changes related to the educational staff have created the necessity for the conditions to make innovations and render efficent alterations in education. By other words, by its current form and content, "to further continuing education by the

¹ "Law on Education" of the Republic of Azerbaijan. <http://www.e-ganun.az/framework/18343> (in azeri)

traditional method, does not meet the economic requirements of the country from the viewpoint of modernity”² and do not answer the demands of teaching quality to be increased.

Colleges are multifunctional subbachelor institutions, because they act as the mostly and maximum to be adaptive institutions to the new socio-economic conditions and regional educational complexes which’ problems up to now are analysed to a certain extent. Despite the changes of the institutional missions, most of colleges in Azerbaijan act as the initial entrance door for the future university students. Another feature of the urgency to meet the changing demands of the similar institutions is connected with the changing requirements of the communities for the innovations. From this view, the choice of strategy and the terms to provide the innovative trends in management create the relevant urgency and scrutiny of the topic to meet the rising demand to the quality of teaching. So, the following conditions can be treated as the **terms to make the selected topic relevant to the urgency**:

1. High speed of ongoing changing processes within the content of teaching in the colleges with pedagogical profile and yet the existing adverse conditions in the pace of improvement processes in management of teaching patterns;

2. Increasing requirements for pedagogical and psychological coordination able to confront the similar disproportion through the rational scientific technical and rational innovative management;

3. Increasing demand for studying the mandatory conditions for implementing the new innovative management processes and mechanism of their influence on the quality of teaching;

4. The more extended necessity for the theoretical research studies the structural components of applications in innovative management of colleges with pedagogical profile for their better coordination with pedagogical staff, potential personnel, material, technical, informative and financial resources.

²Strengthening research, invention and innovations in the higher educational system [Electronic resource / compiled by. S. Safarova Aztehsil. com website – Baku, 01 March, 2019. URL: <https://aztehsil.com/news/8294-azerbaycanin-ali-tehsil-sisteminde-tedqiqat-ixtira-və-innovasiyaların-güclendirilməsi.html>. s.16 (in azerbaijani)

Another relevance of urgency is connected with the situation that, in the scientific and pedagogical literature, the practice of accounting the results of innovative management beyond the borders of teaching results is regarded to be impossible within the local and the world research tendencies. For this reason, there is still retained the urgency of their correlative as the strategic fields.

Today the world outlook of the staff dealing with pedagogical activity, the level of their practical knowledge and skills, their maturity as a personality and some other issues are also among the factors of the urgent demands. It means that, along with being literate, using the effective means of technological innovative novelties and methods has also become to be an important tactics to create the necessary conditions for the adequate quality of teaching.

Despite the abundance of literature on innovative management of college education, the questions related to realisation of innovative management in quality of teaching, mechanism and the dynamic models of their mutual relationship with the issues of raising the quality of teaching, thus, their correlative integrity are not yet sufficiently researched. In order to fill all these gaps, we named our research study as “Innovative management of the colleges with pedagogical profile and its influence on quality of teaching”

The issues of innovative management of teaching and education, their specific features and the ways and devices for increasing teaching quality and the other aspects of pedagogical innovations have been on the focus of Azerbaijani and foreign scientists.

M.Mehdizada, A.N.Abbasov, Ə.Agayev, Y.Ş.Karimov, F.B.Sadıgov, R.H.Mammedzade, P.B.Aliyev, H.H.Ahmadov, S.C.Rasulov, Ə.X.Pashayev, F.N.Ibrahimov, L.N.Gasimova, M.I.Ilyasov, Ə.A.Kalbaliyev, T.I.Shamova, I.A.Sudakov, P.I.Vaganov, S.N.Parkinson, S.V.Sidorov, L.Palucha, I.A.Verhaeghel və R.Kfir, A.Sanchez and others can be examples for these. The issues related to the genesis and forms of innovations have been researched by Russian scientists E.A.Gnatishina, L.V.Sepp, O.F.Kharman, V.I.Zaqvyanskiy, the problems of multifacetedness of innovations have been dealt by foreign scientists B.Anahita, E.R.Jennifer, S.A.Sally, the problems connected with innovative teaching

technologies were analysed by azerbaijani scientists A.M.Nazarov, I.B.Ahmadov, innovative skills were also researched by Ch. Ailing.

T.I.Karpova, N.R.Yusufbekova, M.L.Kakkonen, H.E.Douglas have analysed the parametres of some aspects of innovative managements in their works. Problems of innovative management of educational institutions, as well as colleges, their models were to some extent investigated in their scientific works by I.V.Snikhovsya, B.G.Bodin, M.A.Rikkerink and by many other researchers.

There are also some works written about the different sides of application of innovations, different aspects of a college life, and their relations with quality of teaching as in country, as well as outside the borders of a country. Apart from the questions of management, quality of teaching also assumes a special importance. A.K.Mahmudoglu, R.H.Mammadzade, V.P.Bespalko, S.K.Kaldibayev, V.S.Lazarev, V.V.Mayer, E.V.Matvienko, S.E.Shishov dedicated some of their work on this issue; D.A.Zagrievna, L.I.Sveshnikova, I.F.Filipchenkova, P.P.Gerhardus, M.M.Keupp and others wrote some works about innovation and competency.

Along with these works, starting from 20th century up to now there have been carried out a huge number of researches, particularly, on formation of research competence of students – L.Sh.Abdulova, N.M.Abdullahi, on technological approach to management of colleges – O.V.Elina, Ch.Freeman, N.Postman, on socio-pedagogical mechanisms of innovative college management J.E.Ettlie, on theory and methodology of innovative management C.Cevenini and G.Contissa, F.P.Drucker, B.A.Lundvall, G.Singh, on the role of professional mobility of pedagogues in innovative management of colleges S.A.Morozova, B.V.Boumova, on coceptual foundations of innovative development of pedagogigal educational institutions D.M.Larid, H.J.Alschuler, on preparation of pedagogues for innovative activity V.A.Slastenin, on innovative management of pedogogical staff O.Rzaev, V.M.Anishin, Y.A.Konarjevsky, P.G.Herrmann, D.A.Manea, Ch.L.Shook, R.A.Toopthong, on application, measuring and standardisation of innovations J.E.Fagerbergand others.

Recently, some specialists and scientists from Azerbaijan S.H.Akhundova, F.A.Jabayilova, L.Sh.Amrahli, M.I.Ilyasov have

also written some articles and books on various aspects of these problems. F.B.Sadıgov discussed the questions related to stages and types of innovations, F.N.Ibrahimov, R.L.Huseynzade debated about the contradictory issues in pedagogy and the significance of innovations, A.M.Nazarov illustrated the problems of on the levels of innovations, E.Aliyev discussed the matter of triangular relations of science, education, innovation, H.H.Ahmadov successful in prospective years, the activity of planning the solution in advance, S.Mammadov, the psychological foundations of management, V.A.Slasten and his colleagues enlightened the problem related to the advantages of innovative form of management of schools, F.Moulaert and F.Sekia gave thorough information about the area management function of innovation.

However a conceptual question related to mechanism of influence of innovative management of colleges on quality of teaching did not also get its exhaustive explanation.

To determine the correlation between colleges' innovative management and quality of teaching, the ways of its realisation in organizational-pedagogical works as a whole, modelling possibilities of this correlation for normal and crisis conditions, finding the trends, principles and further impacts of innovative management, stimulating the positive tendencies and determining the preventive measures to further stopping the negative developments are among the questions closely connected with their scientific and theoretical analyses.

Object of research is the innovative management activity in the colleges with pedagogical profile, and **subject of research work** is the correlation of innovative management and the quality of teaching.

Aim of the work is determining the mechanism of innovative management and its influence on quality of teaching, preparing the pedagogical models related to these, testing the innovative management and evaluating the influence of innovative management on increasing the efficiency of pedagogical colleges.

In accordance with the above objectives, taking into account the object of the topic and the objectives of the study, the **purposes of research** objectives of the study include:

- considering the component of innovative management to analyse the tendencies of development of the colleges with pedagogical profile:

- finding the impeding factors in innovative processes in the colleges with pedagogical profile;

- developing the innovative management concept in pedagogical profile colleges;

- preparing the methodology for choosing and selecting the projects to develop colleges of pedagogical profile;

- for raising innovative activity, to determine the organizational and pedagogical conditions;

- preparing methodology to evaluate the influence of innovation on pedagogical efficiency and quality of teaching.

Methodology of research is a set of principles, methods, tools and theoretical provisions applied in studying, understanding and changing pedagogical facts, events and processes.

The following **research methods** were used to implement the set tasks.

- Observation: In Azerbaijan State Pedagogical College under the Azerbaijan State Pedagogical University named after N.Tusi (ASPU) 200 teachers, 100 people with different levels of management, 3000 students were observed on their innovative activity, and their attitude to innovation was studied.

- Interview: 5 directors, deputy directors and 20 chairmen of teaching subject associations were interviewed in order to clarify the facts identified during the interview process.

- Theoretical analysis: Decisions and instructions related to the problem, materials on innovative management of pedagogical colleges, as well as research, pedagogical, methodological, psychological, philosophical and managerial literature were studied and compared.

- Study of documents: Normative legal documents, programs, projects, creative work of teachers, protocols of methodical association and other documents related to pedagogical colleges were analyzed.

- Questionnaire: A survey was conducted with 100 teachers and 100 students at the Azerbaijan State Pedagogical College under the Azerbaijan State Pedagogical University.

Pedagogical experiment: The experiment was conducted in three stages. The first stage (2018-2019) was a determining, the second stage was training stage (2019-2020) and the third stage was (1920-1922) a test experiment. Azerbaijan State Pedagogical College under ADPU and Astara Pedagogical colleges were involved in the experiment.

- Mathematical and statistical methods: The results obtained by the help of survey and experimental methods are summarized and grouped, the quantitative dependence between the issues studied is determined

Scientific novelties of research:

1. The history of formation and development, types, diversity of pedagogical innovation and its causes are studied.

2. The effectiveness of the process of managing the innovative development of pedagogical colleges is ensured by competency-based, result-oriented, axiological, program-targeted, cluster-based, systematic, personality-oriented, activity-based methodological approaches.

3. The main components of the development of innovative management of pedagogical colleges have been developed and it is tested a single, synergetic (stimulating, meaningful, manageable, technological, evaluated and effective) model with flexibility and variability.

4. Organizational and pedagogical conditions have been identified and an experiment has been conducted to ensure the effectiveness of the innovative management of pedagogical colleges in influencing the quality of education.

5. Criteria and indicators for assessing the quality of teaching have been developed to achieve sustainable development in the innovative management of pedagogical colleges.

6. Pedagogical and psychological bases of innovative management of pedagogical colleges, content apparatus and perspectives of its formation are defined.

7. The possibilities of innovative management in pedagogical colleges have been scientifically and pedagogically studied and the mechanisms of the impact of this management on the quality of teaching and the model of its implementation have been developed.

8. Specific questionnaires were conducted among teachers and students on the correlation of innovative management with the quality of education, based on the experiment, a new model of the mechanism of impact of this relationship for both normal and crisis situations was developed.

Theoretical and practical significance of research.

The theoretical significance of the research is that the ideas and provisions put forward in the work will enrich the science of pedagogy with new ideas, will allow the innovative construction of the content of management, methods and systems of work on a scientific basis. This research will also modernize the management theory of secondary special education institutions with new scientific models that make a significant contribution to the management of the education system.

The practical significance of the research is that the results and recommendations will provide practical assistance for innovative management of the colleges with pedagogical profile and will render practical assistance to the teachers, academic group curators, deputy directors for education and social affairs, student councils, youth organizations and other public organizations involved in the life of the college to effectively manage their works.

Provisions brought for defence.

1. Innovative management of pedagogical colleges provides improvement of quality of teaching, increase of competitiveness of experts and increase of professionalism of pedagogical staff.

2. Innovative management is a systematic process that increases the effectiveness of teaching, education and development.

3. The conceptual model of innovative management of pedagogical colleges includes structural components of a single, synergistic nature (stimulating, content, managed, technological, evaluated and effective) with flexibility and variability, and innovations are developed, mastered and disseminated within the process of its formation.

4. Creating an innovative educational environment in pedagogical colleges helps students and teachers to develop innovative potential, develop and implement projects, be responsible and competitive.

5. The essence, content, formation and types of pedagogical innovation as a multifaceted process, as well as the structural elements included here, form the basis of the quality of education.

6. In assessing the innovative development prospects of pedagogical colleges, it is necessary to assess the directions of priority areas.

7. The establishment of a correlation between the innovative management of pedagogical colleges and the quality of education depends on the establishment of work on a pedagogical-psychological basis.

8. The proposed model of innovative management in colleges is a guarantee of improving the quality of education.

9. There is a composite link between innovative management and efficiency

Aprobation and application of reserach. The results of the research were discussed at a number of national and international scientific-practical conferences and seminars at the Azerbaijan State Pedagogical College, Khazar University, Azerbaijan State Pedagogical University and abroad. The iimportant provisions of the dissertation were evaluated and published by the editorial board of the American International Journal of Social Sciences, published in English, as well as the journals and collections of the Commonwealth of Independent States. The main content and main provisions of the dissertation are reflected in 8 scientific articles and 4 theses.

Name of organization where the disseration is accomplished. The work was performed at the department of Education of Khazar University.

Structure and volume of the dissertation. The dissertation includes an introduction, 3 chapters, 9 paragraphs, a conclusion, a list of used literature and an appendice. Introduction 11 pages, 20,562 characters, Chapter I 44 pages, 83,488 characters; Chapter II 31 pages, 57,877 characters; Chapter III covers 44 pages, 77,460 characters, conclusion 3 pages, 5,236 characters, used literature list 19 pages, appendice 1 page, the research work consists of 156 pages and 245,865 characters in total.

THE MAIN CONTENT OF THE RESEARCH

"Introduction" reflects substantiation the relevance of the topic and the degree of its scrutiny, the demarcation lines of similar terminological judgments on the topic, the main concepts used in the research, the object and subject of the research, aims and purposes, methodological basis, research methods, scientific novelty, provisions of defence, theoretical and practical significance of the research. It also states that strategic planning in colleges is a complex system that clarifies what the college does, why this plan is developed, and what this planning serves. Such planning is a direction that shapes the line of action of each college and directs them to their future endeavors, shaping their well-thought-out decisions and actions. It is no coincidence that this includes not only the current situation, but also the management of competitive changes in the future, the involvement of all stakeholders in this management, and the proper evaluation and direction of organizational and financial resources. As it can be seen, **innovative management as a type of management in general**, was not a process that was left out of the general strategic planning, but acted as an integral part of it.

In the first chapter's **"Innovation in education"** the first subchapter entitled as **"The essence, formation and development of innovation"** it is analyzed and studied the essence, content, structure, formation of educational innovations. It was noted that educational innovation has a number of features:

1. Educational innovation has a dual nature (i.e., it depends on the level of economic and political development, on the other hand, it is cognitive by its features);
2. Being as a whole process, it turns the economic needs into educational arguments to create benefits and effectiveness through interest in various pedagogical processes;
3. The function of the state in its implementation is not limited to the application of existing innovations, the state also gives innovations the character of public legitimacy, "accessibility" considered acceptable by "everyone";

4. Educational innovations develop mainly on a two-pronged basis – through structural innovations and education reforms, but not limited to them;

5. The economic basis is dominant in both forms of innovation, but by its nature, innovation does not only reflect the mechanism of control over itself, but also disseminates these innovative innovations in society.

In the past, Russian scholars have made interesting observations in their research on innovation in education. Commenting on the innovations, they noted that these innovations are "*stable elements that are purposefully brought into the educational environment, improving a particular area of education or the education system as a whole.*"³

In the 60s and 70s of the last century, no significant research was conducted on educational innovation, and innovation was mostly studied as an integral part of scientific management. In later times this concept was interpreted more as "*the successful application of something new or a method*"⁴. The report by the United Nations' Educational, Scientific and Cultural Organization says: "*educational innovation refers to the ideas and practices with specific educational content to meet unmet needs.*"⁵

This sub-chapter analyzes the sources of innovation experience in pedagogical colleges and develops a model based on these sources. It is shown that there are 2 main sources of innovation practice in colleges: direct innovators and those related to students of innovation. The components that directly create innovation in pedagogically oriented colleges are given in the presence of college experience in this field, implementation of innovative practice

³ Егоров В.В. Педагогика высшей школы: Учебное пособие. /В.В.Егоров, Э.Г.Скибицкий, С.М.Ударцева [и др.] – Караганда: – 2013. – с. 226 - 409 с.

⁴ Brewer D.J. Barriers to innovation in the US education //D.J. Brewer, Tierney W.G. (Eds) - in B. Wildavsky, A. Kelly and K. Carey. Reinventing Higher Education: The Promise of Innovation. - University of Southern California, Harvard Education Press, Cambridge, MA, – 2012, -p. 15. -p.11-40.

⁵ Innovations and initiatives in teacher education in Asia and the Pacific Region. Comparative Overview of Fifteen Countries Teacher Education Innovations /UNESCO Principal Regional Office for Asia and the Pacific, Bangkok, Thailand – Bangkok, 1990. Vol 1. -p.2. – 120 p

through imitation and imitation, and potential intra-college interaction. **The intra-college creativity potential** includes the following components: 1. Creative component: First of all, it includes the attitude of college educators to innovative activity, not as a combination of ready-to-use forms, but effective and positive changes brought by themselves in accordance with the content of innovation. 2. The motivational component arising from the college strategy: This is interpreted in different ways in the scientificpedagogical literature. We believe that the motivational component derived from the college strategy in its shortest form is the intensity and direction of its innovative strategy orientation. 3. Communication component in colleges: Creation of "Communication Centers" is the most important element serving this component. The development of the communication block plays a positive role in innovative management, especially in the continuity of teacherstudent-parent relations and in improving the quality of education, in the classroom and among peers, it plays the role of a verbal and visual communicator for the media and public audience. It is also considered an online portal for students, faculty, and staff to access and update their personal information, view schedules and grades, and communicate with others in the college community. 4. Teacher and staff worldview component: It includes the professional beliefs, attitudes and ideologies of teachers and other staff. Personal beliefs and values should be in harmony with educational goals. 5. Personal component: In training and teaching, this component is considered as an organizing force that directs the efforts of human resources and motivates them towards excellence for the greater success of learners and educators as a whole.

In pedagogical colleges, the factors directly creating innovation and related to the demands of innovation both operate in interaction with each other.

Thus, what is considered innovative differs from others in its nature; they go beyond generic approaches and emphasize specificity, efficiency, and scalability. In innovation, **the circulation or reproduction of an innovation** is considered essential to these skills. Because one of the main differences of innovation from other

similar concepts is that it is not kept secret, and it is possible to benefit from this benefit as a "common product" by circulating it.

The second subchapter of the first chapter is entitled "***Types of pedagogical innovation***". The author notes that innovations are very diverse in their areas of application, and one of these types is considered to be pedagogical innovations. Thus, while educational innovations apply to all of the infrastructure included here, pedagogical innovations include teaching methods, direct intervention in the teaching process by technical means, and their effectiveness.

In general, there are two important elements that make up the conceptual framework of pedagogical innovation – social and technical. However, innovative teaching should not aim to bring different abilities and skills to the same level. Pedagogical innovation is an intentional action or application that aims to introduce an original method, method or structure in a given context.

There is also a vast difference between pedagogical innovations and educational innovations. Thus, while educational innovations apply to all of the infrastructure included here, pedagogical innovations are more likely to involve direct intervention or application to the teaching process through their teaching methods or technical devices.

The author distinguishes innovations according to their types, parameters, application features and other aspects. Therefore, the identification of the most popular types of pedagogical innovations can be ensured by conducting a thorough analysis of the criteria that create this division and their framework, their means and ways of influencing on the pedagogical process and management, as a whole. Not by the types of their directions, but by depth of their dynamics or radicality, as well as by their transformative nature, pedagogical innovations can be divided into three groups: a) improving, b) radical pedagogical innovative and c) transitional-transformative types.

As a result, it is recommended that each of the innovative pedagogical innovations that have been successfully tested and implemented have different subgroups and combine them into 5 important groups:

1. Innovations intended for application according to their direction;

2. Pedagogical innovations divided according to the forms of implementation and compliance with the goals;
3. Types of management-oriented pedagogical innovations;
4. Classified by context;
5. Pedagogical innovations divided by intensity.

According to these criteria, the classification of innovations by all five types corresponds to the mechanism of change of the elements characteristic of the internal nature of the training quality in parallel, as well as to their phenomenological dynamics. This means that **variability and dynamism** are considered to be a correlative relationship between pedagogical innovation and learning quality, and this relationship has a crucial role in realizing the impact on learning quality in innovative management. Factors that create dynamism here and cannot be counted in the application of pedagogical innovation – increased teaching quality (which is measured by results that cannot be counted during pedagogical application, but can be counted as a result), strengthened internal and external college network, more advanced pedagogical structure and sustainable development (material and human resources (on) conditions make it possible to change the scope of innovative applications, to create opportunities for management with smaller resources due to the application of innovations, to promote innovative products that can be expressed in numbers in college life and beyond, and also to transfer innovative products to newer fields.

In addition, in this subchapter, it is recommended the necessity of considering the *intensity* and *goal-orientedness* of pedagogical innovations while classifying them.

The third subchapter of chapter I is called "***Diversity of innovation***". The innovation diversity section is devoted to the investigation of the following issues: 1. Reasons and conditions that make innovations diverse; 2. Similarities and differences between pedagogical innovations and economic and business innovations; 3. Differences between conventional innovations and innovative innovations; 4. Important sources of multifaceted innovation; 5. Innovations applied in the leadership and management of educational institutions and their nature; 6. Important conditions that create diversity in innovations; 7. Identifying the characteristics of an

important type of multifaceted innovations – pedagogical innovations; 8. Analysis of collected factual materials on the understanding of the content apparatus of innovation.

This section shows that the diversity of innovations sometimes results in the inclusion of seemingly ordinary facts into innovations. In terms of leadership and management of educational institutions, innovations are diversified as follows: 1) by scale – belonging to one organization, regional, national-regional, belonging to a new type of educational institution; 2) by the nature of the pedagogical work carried out - unrelated, realized in individual, local, global and other forms; 3) by the implementation module – private, interconnected and systematic, covering a complex of innovations; 4) by their origin – modified, i.e. improved, added to the originally existing one with a new component or having radically different forms and contents.

The diversity of innovations depends not only on the field in which they are, but also on the nature of their processes, or way of life they belong to. This diversity is due to a number of conditions. These conditions are also generally related to the soaring number of innovations and their multitude types.

- First, it depends on the internal nature, essence and ability to fulfill the socio-economic order of innovation.

- Second, the diversity of innovations is due to the creative potential and depth of creativity of people working in that field.

- Third, innovative diversity is due to the quantitative and qualitatively complex nature of the problems they face.

- Fourth, this is due to the dynamic nature of innovations, i.e. innovations can take different forms and content in accordance with constantly changing conditions; they can simultaneously evolve and change and re-emerge in a new form and content.

Thus, what is considered innovative differs from others in its nature; they go beyond generic approaches and emphasize specificity, efficiency, and scalability. However, until the second half of the last century, innovations were studied as a part of scientific management, and no serious researches were conducted in this field. Therefore, the basis of innovation in education and the determination of sources of innovative experience remain relevant today.

The second chapter's "**Scientific and pedagogical bases of innovative management of colleges**" first subchapter is devoted to "*Pedagogical and psychological features of innovative management*". This section discusses and analyzes three fundamental scientific and theoretical conditions for creating an organizational environment that promotes strategic innovative governance. It is stated that, pedagogical-psychological structure of innovative management of colleges is formed within the activities of all participants in a college life. This includes important elements of the activity. These elements are:

1. Creative research nature of the participants' activity innovative management;
2. Analytical nature of activities of the college management;
3. Assessment and consideration of cultural values;
4. The dialogic nature of interaction of the participants in innovative management – in the mode of control, mutual control and self-control;
5. Systematic organization of the content of education and training;
6. Decentralized or collegial management of innovative processes that involve the independent use of personal and professional experience, ideas and initiatives of participants in innovative management activities.

Scientific researchers and a number of analysts and specialists such as A.Nazarov, C.Abramova, V.P.Bespalko, Y.V.Vasilyev, H.Derzkova, V.I.Juravlyov, Y.A.Konarjevskiy, T.Orlova, S.N.Parkinson, S.Shishov, Ch.Ailing, A.Albers, M.Crossan, D.Edward, E.H.Douglas, McLean D.Larid, M.Frank, R.Greg Oldham conducted investigations and analyses on scientific-pedagogical, pedagogical-psychological features of innovative management.

The second chapter's second subchapter is entitled as "The content of the work on the formation of innovative activity." It considers that this content, on the one hand, is related to (1) local economic and social factors, innovative potential, on the other hand, it (2) depends on the study of international experience.

Innovative college teachers face specific pedagogical goals that they aim and will have to achieve in the pedagogical process. The

formation of this innovative management is formed in the interaction of theoretical, methodological, technological and research aspects.

The process of formation of innovative activity is a procedure in which a scientific idea becomes an educational innovation, and it is formed and developed in combination of these means. That is why its specificity and stages are in a certain order, consistent and periodic. This includes the following stages: 1) the emergence of innovation; 2) the processes of its rapid development, maturity, circulation, satisfaction or vice versa in the struggle in a competitive environment; 3) making innovation an integral part of daily life activities; 4) its improvement or crisis; 5) finally, the cessation of innovation.

In this subchapter, it is developed and analyzed a model for the formation of innovative activities.

In the third subchapter of the second chapter "*Prospects for the development of innovative activities*", the existing trends such as (1) strengthening the orientation of society towards marketing or evaluation of marketing consciousness, (2) superior promotion of environmental benefits, (3) green themes, sustainable solution technology, dominance of green products and green processes, (4) strategic character of educational innovations, their practical usefulness, strengthening of its perspectives based on positive results, (5) strengthening of cognitive business intelligence, (6) issues of technology transfer and (7) superior development of technology-based processes are analyzed and commented.

During the perspective development of pedagogical innovations, the identified innovations are carried out mainly in 3 perspective directions: 1. Perspective innovations that can lead to a change in society; 2. Innovations presented as progress; 3. Innovations made for personal gain, prestige or professionalism. In this subchapter, the author has also developed a perspective development model of pedagogical innovations and analyzed the mechanism of interaction of its structural elements.

The third chapter's – "**Opportunities for the impact of innovative management in colleges on quality of education**" first subchapter – "*Innovative management of pedagogical colleges and mechanism of its impact on the quality of teaching*" – analyzes the opportunities for innovative management of colleges, its social

content and role in improving the quality of teaching, minimum innovative management requirements for the establishment and implementation of quality control of teaching in pedagogical colleges, innovative behavior and other related issues. Effective management of innovation in college life and its integration into one organism is associated with five main operations. First, innovations are considered important to solve the problems faced by college life; second, this importance is due to its adaptation to the changes taking place; third, the quantitative and qualitative development of the share of innovations in college life is an important factor in its maximum integration into the globalizing world; fourth, this is due to increased competition in the world education system; fifth, the change in jobs and its demographics in the world market has brought to the fore the concept of a "new college graduate" who is able to enter the job market. Thus, the innovative management of colleges is closely linked to the ways in which these innovations are implemented.

The subchapter also, discusses important factors such as taking a number of important steps to realize the potential of innovative management to influence the quality of education, and an innovative approach to the evaluation of pedagogical work and gives a model of minimum management requirements for the establishment and implementation of control on quality of teaching.

The third chapter's second subchapter is entitled as "***Models of influence of innovative activity on the quality of teaching in colleges***". This sub-chapter analyzes the conceptual approach to the innovative activity of colleges and the principles of modeling, its components and generalization of this activity.

Innovative college management combines four important components – structural, functional, criteria-based, and managerial.

Four important sources have a special role in the implementation of innovative management activities in the quality of education in colleges: a) individual educators; b) various associations of teachers (local, regional, global); c) students, school administration or management; d) the government or relevant ministries.

All models used in the management of colleges by their type should be considered as both (1) planned innovative management models and (2) crisis management models. The difference between

them is due to the possibility of influencing the quality of education in different ways, depending on the nature of the crisis.

The third chapter's third subchapter is entitled as "*The mechanism of the impact of innovative management on the quality of teaching and its measurement (experiment and generalization of its results).*" It comprehensively analyzes the concept of quality teaching and explains the role and methods of innovative management in improving this quality. The author gives analytical and scientific interpretations of the results of a specific survey in this regard and notes that based on the relationship between the concepts of training and quality, it would be appropriate to consider the quality of teaching as a social, economic, pedagogical category. From a methodological point of view, the definition of the quality of teaching should be approached not only in the education system, but also as a characteristic feature of the educational process and its outcome, which is important for the development of society as a whole.

Surveys have shown that innovative management differs significantly in assessing the knowledge of students admitted to pedagogical colleges and improving the quality of teaching. Innovative management creates opportunities for adaptive, innovative, modified and transformative impact.

In order to measure the impact of innovative management on the quality of education, in 2018-2019 and 2020-2022 in Azerbaijan State Pedagogical College (ASPC) operating under the Azerbaijan State Pedagogical University named after N.Tusi and Astara Pedagogical College (APC) it was conducted pedagogical experiment including 100 teachers and 100 students, respectively. The beginning of the experiment covered 2018-2019, and the end of it covered 2020-2022. The results of the experiment showed that at the beginning majority of respondents had difficulty in linking the quality of teaching with innovative management.

The survey questions selected for the experiment were repeated both at the beginning and at the end of the experiment, and the results were collected and analyzed. The correlation between innovative management and quality of teaching was in the selection of criteria. At the end of the experiment, statistical analysis was conducted to

determine whether there is integrative relationship between innovative management and quality of teaching, and the trend of development was identified. The results of a survey of teachers conducted at the beginning of the experiment (2018-2019) on the impact of innovation on the quality of teaching in the selected two pedagogical colleges are shown in table 3.3.1, and the results of the students' responses are shown in table 3.3.2.

Table 3.3.1.
Result of survey provided by ASPC and APC teachers
depicting the influence of innovative management on quality
teaching 2018-2019 (start of experiment)

College name	Do the innovations applied in your college affect quality of teaching?		
	Yes	No	Difficult to answer
ASPC	54%	31%	15%
APC	41%	35%	24%

After the first stage of the pedagogical experiment, the students and teachers were informed about both teams were informed about the nature and forms of innovative work in colleges in the teacher-student-leadership segment. As a result, teachers' innovative implementation capacity has increased, which is reflected in the dynamics of real-world quality assessment. The results of the measurement were, of course, different in the responses of both teacher and student respondents from both teams.

Table 3.3.2.
Result of survey provided by ASPC and APC students
depicting the influence of innovative management on quality
teaching 2018-2019 (start of experiment)

College name	Do the innovations applied in your college affect quality of teaching?		
	Yes	No	Difficult to answer
ASPC	48%	24%	28%
APC	43%	35%	22%

In order to examine the potential impact of innovative management and innovative teaching on the quality and the dynamics of development of this impact, a year later we again conducted a survey in the pedagogical colleges which involved. 100 faculty members and 100 students from both colleges. The results of the teachers' response to the survey are shown on the table 3.3.3, and the the results of the students' surveys are shown on the table 3.3.4.

Table 3.3.3.
Result of survey provided by ASPC and APC teachers depicting the influence of innovative management on quality teaching 2020-2022 (start of experiment)

College name	Do the innovations applied in your college affect quality of teaching?		
	Yes	No	Difficult to answer
ASPC	77%	18%	5%
APC	59%	24%	17%

Table 3.3.4.
Result of survey provided by ASPC and APC teachers depicting the influence of innovative management on quality teaching 2020-2022 (start of experiment)

College name	Do the innovations applied in your college affect quality of teaching?		
	Yes	No	Difficult to answer
ASPC	59%	18%	23%
APC	53%	27%	20%

After collecting the results of the pedagogical experiment conducted for both years, we analyzed the statistical indicators obtained by mathematical calculation. The results are summarized in Table 3.3.5.

Thus, in 2018-2019, summarising the assessment results on correlation of quality teaching and application of innovations, the

survey results of the teachers in ASPC – 54%, and the students results on the the same matter – 48% were summed up and divided into the number of assessment groups – 2 (students and teachers) where we have got the final indication of interdependency between the innovation and the quality of teaching, where the formula for this organization for that year may stand as $(54\%+48\%)/2=102/2=51\%$. These indicators were calculated by the formula $(77\%+59\%)/2=136/2=68\%$ in ASPC for 2020-2022, respectively (table 3.3.5)

Table 3.3.5.

Comparative statistics measuring the influence innovative management on quality of teaching in 2018-2019 and 2020-2022
Survey results and comparative statistics of pedagogical experience in ASPC and APC

How the innovations applied in your college affect the quality of teaching?			
ASPC teachers	Yes	No	Difficult to answer
2018-2019	54	31	15
2020-2022	77	18	5
Dynamics	+23	+13	10%
APC teachers	Yes	No	Difficult to answer
2018-2019	41	35	24
2020-2022	59	24	17
Dynamics	+18	+11	7%
ASPC students	Yes	No	Difficult to answer
2018-2019	48	24	28
2020-2022	59	18	23
Dynamics	+11	+6	5%
APC students	Yes	No	Difficult to answer
2018-2019	43	35	22
2020-2022	53	27	20
Dynamics	+10	+8	+2%

For ASPC, the dependence of teaching quality value on innovation for **2020-2022 increased by 17% compared with previous years and became 68%.**

This proposition was 42% for APC in 2018-2019, respectively, and in 2020-2022, it also **increased by 14% and at the end of the experiment it reached to 56%.**

These results are considered as good because the 60% share of innovation production in the management of education at high and very high standards indirectly means quality and progress at the level of college education. However, indicators that innovations are produced on a small scale or not produced at all can be explained by the fact that the level of motivation of some decision-making management and / or faculty at this college is weak or low.

In order to verify the results of the pedagogical experiment, our next survey was close to the previous question, but it again confirmed that the actual situation of correlation between innovation and teaching quality in these organizations (table 3.3.6) did not vary greatly and was identical to the results gained as on the table 3.3.5 and thus, innovative management has a special role in improving the quality of teaching.

Table 3.3.6.
The indicators of correlation between the application of innovation and teaching quality 2020-2022

Now does application of innovation develop quality teaching in your college?						
	Very high	High	Weak	Does not dev at all	Total quality %	Total success %
ASPC teachers	25	45	22	8	70%	92%
APC teachers	23	40	20	17	63%	83%
ASPC students	28	40	8	24	68%	76%
APC students	22	38	11	29	60%	71%
Total quality%	ASPC - 69%			APC - 61%		

Today, in the world practice, there are other approaches in measuring the quality of teaching in the scientific-theoretical base and methodology. For example, Russian scientists divide the quality criteria of teaching into two main groups - objective and subjective. Criteria for objective evaluation include integrity, depth, flexibility, specificity, generalization, systematicity and diversity of teaching. Subjective criteria show that the main features of knowledge are flexibility, transferability, comprehensibility and robustness. In some approaches, we see the inclusion of relativity in the list of components. Scholars usually refer to this component as the components of knowledge that affect the quality of knowledge - the benefits that knowledge brings to the community in which the college operates, its content, usefulness, intent, and so on.

The results of the research are as follows:

The problem of the impact of the innovative management of pedagogical colleges on the quality of education is a topical issue both in our republic and abroad. However, no matter how much this scientific problem is studied in the scientific-pedagogical literature, the emergence of new fields causes the problem to remain on the agenda continuously, thereby strengthening the interdisciplinary polemic.

Issues such as the formation, organization and content of innovations have been widely investigated and shown in the research work. Innovative management is cognitive based on the economic base in accordance with the concept of strategic planning, and it forms a mutual unity and connection with it.

Competence arising from innovation content is formed on the basis of conditions that determine diversity and relative autonomy, and it reflects three important scientific-pedagogical features in the innovative management of colleges. These include: a) the unique uniqueness of the collective (ontological side) b) having different ideas and powers (differential axiological side) and c) the direction of motives (functional side). The dissertation shows that the innovation potential of colleges is realized not only due to their internal capabilities, but also through territorial innovation systems

and is multi-component structure; and national trends and international experience play an important role in these components.

As a result of the research, it was determined that pedagogical innovation aims at three important perspectives:

- makes changes in society;
- creates innovations as progress;
- serves personal gain, reputation or professionalism.

The dissertation summarized the pedagogical experiments carried out in 3 stages and concluded that since innovative management has become the main part of the strategy of improving the quality of education in pedagogical colleges, not only its influencing factors on the quality of education should be carefully studied, but also harmonious processes should be created for its management.

Finally, we consider it necessary to put forward a number of recommendations and suggestions related to this research.

1. The history of the emergence of existing innovations in the field of education and the first use of this paradigm was associated with the great changes in science, technology and culture at the turn of the 19th and 20th centuries.

2. Since the study of the content, types, mechanism of innovations and their causes, the opportunities they create and the mechanism of their impact on the quality of education is one of the deepest scientific-theoretical concepts, this problem is constantly studied in both individual and interdisciplinary systems.

3. Pedagogical innovations are cognitive in nature and multifunctional in their activity.

4. Innovative management of colleges improves the management process, improves the quality of education, eliminates differences in students' knowledge, and thus develops by forming its own specific form and system.

5. Innovations are represented in a multidisciplinary system by scale, nature, and implementation modules.

6. Innovative management of colleges in its pedagogical and psychological features includes three important qualities – the competence of employees, their diversity of opinion and autonomy.

7. Innovative management creates innovation in many areas, but its application in training is always related to quality.

8. Establishment and implementation of quality control of education in pedagogical colleges is multicomponent.

As a logical continuation of these results, we consider it necessary to develop the topic in the current situation and make the following suggestions and recommendations for future prospects.

1. When analyzing innovative activity, scientific, practical, scientific, organizational and pedagogical elements of its essence must be taken into account.

2. The modeling of innovative management of colleges should take into account both traditional education and training, as well as their management characteristics in a possible crisis situation.

3. Although technology itself is not a separate innovative management, its participation in non-traditional (extreme) learning (adaptive-innovative, modified and transformative features) and the potential for revolutionary influence to overcome backwardness in innovative approaches must always be kept in mind.

4. When studying the types of innovations in the scientific and theoretical literature, reference to the models of implementation (structure, function, criteria-based and level of management) that lead to their proliferation provides a systematic approach.

5. It is important to keep in mind how important technology, method and efficiency are in innovative management. It is equally important for the quality of training that it can be counted and counted.

6. The reasons for the sustainability of innovation practice are related to the correlation of factors that directly create innovation at its source and are associated with the effects of innovation.

7. In the typological distribution of innovations, their depth and intensity should be assessed as leading parties.

8. In defining the content apparatus of pedagogical innovation, it is proposed to take into account the newly defined definition of this research: is considered a process that creates effective (countable and uncountable) change and leads to better learning of students in training and education ”

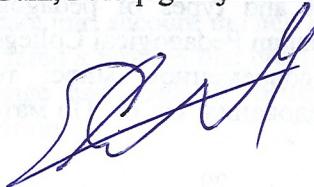
9. When examining the interrelationship between the quality of teaching and innovative applications of pedagogical colleges, the characteristics of the administration of the educational process, the form in which the educational process and its strategies interact with the components of education quality are essential.

10. It is recommended that the number and quality of problem-solving research be increased in the future to fill gaps in the implementation of this interaction, as innovative behavior greatly assists pedagogically oriented college staff in exploring opportunities.

The main content of the dissertation is reflected in the following published articles of the author:

1. Təhsil, İnnovasiya və İdarəetmə.//Sivilizasiya jurnalı, – Bakı Avrasiya Universiteti, – İyul 2018 (38), Cild 7, No. 2.) – s. 12-18.
2. Management of Colleges with Innovative Trends: Indicators, Criteria and Success. (İngilis dilində) //American International Journal of Social Sciences. (Print) 1030845/aijss double-blind peer reviewed journal, Bangladesh. –September 2018. Volume 7, No. 3, – p. 100-105.
3. Kolleclərdə İnnovasiya Sisteminin Yaradılması//Azərbaycan Respublikası Təhsil Nazirliyi, Azərbaycan Respublikası Təhsil İnstitutu, Elmi Əsərlər, – 2018-ci il, –cild 85, No.8, – s. 296-303;
4. Pedaqoji innovasiyaların növləri və onların tətbiqi xüsusiyyətləri// “Azərbaycan məktəbi” jurnalı, “İnnovasiyalar” bölməsi, – 2019, №1 – s. 57-67.
5. “Təhsildə “yeniliklər” və “innovasiyalar”//Azərbaycan və Türkiyə Universitetləri: Təhsil, Elm, Texnologiya I Beynəlxalq Elmi-praktiki konfransa dair Toplu, (3cilddə) – 2019, Dekabr 18-20, cild 1. – s.163-168
6. Origin, development and types of pedagogical innovations (Case study in Azerbaijan Pedagogical College). // Педагогика и психология в современном мире: теоретические и практические исследования: сб. ст. По материалам XXXIII

- Международной научно-практической конференции. – Москва: Интернаука. № 3(33). –2020, с. 107-118. – 172 с.
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 8. İnnovativ fəaliyyətin inkişaf perspektivləri. //–Bakı: Slavyan Universiteti, Beynəlxalq elmi-praktiki onlayn konfrans, “Filoloji elmlər innovativ tədqiqatlar kontekstində”, – Bakı: Mütərcim, – 2020, 24 dekabr, – s. 25-29. – 596 səh.
 9. Kolleclərdə innovativ təlimin pedaqoji və psixoloji xüsusiyyətləri Məqalə. //– Bakı: Azərbaycan Respublikası Təhsil Nazirliyi, ADPU, Elmi Əsərlər, Pedaqoji-psixoloji elmlər bölməsi, – 2021, Cild 69, № 4, - s. 109-121. –133 s.
 10. İnnovativ təlimin tarixinə dair araşdırmalar. Məqalə // –Bakı:Azərbaycan Respublikası Təhsil Nazirliyi, Bakı Qızlar Universiteti, Elmi Əsərlər, Pedaqogika bölməsi, – 2022, Cild 13, № 1, – s. 91-96
 11. Kolleclərin innovativ idarəçiliyi və onun təlim keyfiyyətinə təsiri modelləri. Məqalə //–Bakı:Azərbaycan Respublikası Təhsil Nazirliyi, Azərbaycan Respublikasının Təhsil İnstitutu, Elmi Əsərlər, Təhsilin idarə olunması məsələləri bölməsi, “Mütərcim” Nəşriyyat-Poliqrafiya Mərkəzi. – 2022, №1, –s.187-193.
 12. Müəllimlərin innovativ fəaliyyəti və onun struktur elementləri. Məqalə//– Bakı, Pedaqogika jurnalı. –2022, № 1, – s. 22-30



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