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## **MONITORING OF FUTURE MANAGERS' RESEARCH COMPETENCE IN HIGHER EDUCATION INSTITUTION**

**ABSTRACT**

The paper presents the results of the work on monitoring research competence in teaching students of higher education institutions in the specialty of management. The system of monitoring research competence by means of qualimetric tools - factor-criteria model, makes it possible to achieve the following results: to determine the level of its formation at the initial stage; to track the dynamics of the formation and make adjustments to educational technology; to provide students with self-control means at the final stage of studying the course. The model is built in accordance with the content of the stages of business practice research (business processes and management systems), which allows „equipping” students with the means of self-diagnostics of the competence quality and is an objective indicator of the achieved results of the educational process.

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**KEYWORDS**

research competence, monitoring, factor-criteria model

**Introduction**

During active social change, the professional managers' training should move towards greater dynamism, flexibility and distance from patterns. Specialists who are not only well versed in their specialty, but also able to quickly adapt and learn new knowledge and master skills have been in demand. The manager must think actively and independently, creatively solve various management tasks, search for solutions in new environment. In this case, he or she will be able to organize the operation of the management object entrusted to or created by him at a high level that meets modern requirements.

It is known that the content of management activities reveals the functions of forecasting (planning), organization, control, regulation, coordination, activation (motivation). Currently, in the processes of management development there are new realities and new needs, which in some way are reflected in the content of management. Therefore, management needs to be complemented by a research function. It is a consequence of growing dynamism and diversification, an important factor in crisis management, increasing the importance of professionalism in management. A modern manager should not be a scientist in the conventional sense, he or she must be well versed in basic research techniques, be able to organize such activities in search of new factors to improve management. Thus, today research acts as one of the main functions of management, as an approach to management that ensures the quality of management decisions and an instrument for improving management (professionalism, innovation, motivation, etc.). To implement the research function, the manager must have expertise in the field of research.

2018/0008 (NLE) Recommendation of the European Parliament and of the Council (EU) of January 7, 2018 contains the competencies required for lifelong learning, namely: literacy competence; languages competence; mathematical competence and competence in science, technology and engineering; digital competence; personal, social and learning competence; civic competence; entrepreneurship competence; cultural awareness and expression competence [13]. Our focus is on learning competence. It is generally known that the learning process is closely related to research, contains identical components: analysis and processing of scientific information, modeling of objects and subjects of study (mathematical, physical, structural and functional), implementation of various experiments and observations, evaluation of results. Thus, research competence is necessary for lifelong learning, i.e. personal and professional development.

In accordance with the Tuning Project, the research competence is identified, within systematic generic skills, known as Research skills (Sierra Alonso, 2011) [14]. Thus, students of higher education institutions in the specialty of management should have research competence.

The purpose of the study is to develop and test a factor-criteria model for monitoring the formation of research competence. Object of study: the educational process of masters-managers in higher education institutions. Subject of study: monitoring the formation of research competence of future masters-managers.

Methods of theoretical and empirical research were used to solve the tasks of the research. Among the theoretical methods the following were used: analysis of monitoring methods; generalization of information on the development of factor-criteria models. Empirical methods used: monitoring the formation of research competence; method of expert assessments.

Formation of research competence of managers has been in the focus of scientists O. Goncharenko, V. Nagaeva, O. Popova and others. Developments in the theoretical qualimetry are represented G. Azgaldov, O. Anufrieva, G. Dmitrenko, G. Yelnikova, E. Reichman, V. Cherepanov, V. Tsyba and others, but modern theory and practice still need to develop and implement qualimetric models to evaluate certain aspects of the activities of specialists, in particular, competence. In this case, the implementation of a qualimetric approach to the objective, quantitative assessment of any object, subject, phenomenon or process is to create a factor-criteria model. V. Grigorash, G. Yelnikova, O. Zahika, R. Zelensky, O. Kovalenko, K. Kolos, M. Rostoka, Z. Ryabova and others provide theoretical principles of development and use of factor-criteria models in their works.

#### **Development of a factor-criteria model for monitoring the research competence of future managers**

Our consideration of the monitoring issue starts with the referral to the Law „On Education” (Ukraine, 2017). Thus, “... monitoring of the quality of education - is a system of consistent and systematic measures taken to identify and track trends in the development of quality of education in the country, in certain areas, in educational institutions (other educational entities), to establish the conformity of actual results of educational activities to the stated goals, as well as assessing the extent, areas and causes of deviations from the goals” [8, p.10]. At the same time, monitoring of the quality of education can be both internal and external. Internal monitoring of the quality of education is carried out by educational institutions (other educational entities).

External monitoring of the quality of education can be carried out by any bodies, enterprises, institutions, organizations, other legal entities involved in an independent assessment of the quality of education and educational activities. The participation of educational institutions (other educational entities) and participants of the educational process in the external monitoring of the quality of education is voluntary, except in cases established by law. Consider the functions of monitoring in education.

Monitoring in education performs certain functions:

- information function makes it possible to determine the effectiveness of the pedagogical process, to obtain information about the state of the object, to provide feedback;
- investigative and research function provides for participation in the monitoring of various entities of the educational process. It promotes improvement of professional culture and staff mobility. Research and development is the basis of pedagogical professionalism, skills and creativity;
- formative function - introduction of monitoring in education contributes to a more effective implementation of the process of personality formation. Results of monitoring assessment allow choosing methods and techniques of individual influence on the student, so that the problematic aspects will be within the teachers' focus;
- corrective function is closely related to the formative function. The focus of monitoring on the features of current processes involves the identification and recording of unpredictable results of educational activities, which help eliminate the negative aspects of the professional development of the specialist;
- system-forming function - requirements of scientificity of any monitoring provide, first of all, its organization and carrying out on the basis of the system approach [6, p. 210].

Due to its functions, monitoring acts as a complex system, the task of which is to monitor the state of development of the pedagogical process in order to make the most optimal choice of goals and objectives, as well as means and methods of their solution. Therefore, monitoring requires powerful tools. One of such tools is the factor-criteria model. Consider the theoretical provisions for the development of factor-criteria model for monitoring the formation of research competence of future masters-managers. The theory of qualimetry has been in the focus of many scientists, however, modern theory and practice still require the development and implementation of qualimetric models to assess certain aspects of the activities of specialists. In this case, the term „qualimetry” (from the Latin *qualis* - quality and from the ancient Greek *metrio* - to measure) refers to the branch of science that studies the methodology and problems of developing comprehensive quantitative assessments of the quality of any subjects, objects, phenomena or processes [1].

Note that the basis for developing qualimetric tools for measuring the level of formation of research competence is the structure of research competence of managers. Based on the work of scientists [3;4;5;7;10], we will identify the sequence of actions for the development of qualimetric tools for measuring the level of formation of research competence. Thus, the sequence is as follows:

- 1) definition of the essence of the term „factor-criteria model of research competence of managers”;
- 2) substantiation of the components of the factor-criteria model of research competence of managers;
- 3) presentation of certain factors and criteria of the model of research competence of managers;

- 4) description of the method of determining the weighting factors of each of the factors and criteria;
- 5) completion of a factor-criteria model for measuring the level of formation of research competence of managers.

Based on the work of scientists and personal experience, we define that the factor-criteria model of research competence of managers is a system of interrelated factors and criteria that determine the level of compliance with established standards of training, educational goals and trends in management theory.

At the next stage we will define the factors and criteria of the future model. Based on the developments provided by V. Grigorash, G. Yelnikova, O. Zahika, R. Zelensky, O. Kovalenko, K. Kolos, M. Rostock, we define that the factors are values that characterize the basic qualities of the object (or its key components) that correspond to the global goals of the object, the criteria detail the factors, i.e. reveal them. In our work, the key qualities of the research competence of managers are the components of their research competence. Thus, the following components are accepted as factors: motivational

-value, cognitive, operational-technological, reflexive and personal. Criteria choose the content of each component of research competence of managers:

- motivational and value (awareness of the role of the research component of professional activity for own innovative searches and discoveries on management problems; understanding of the importance of studying issues in business; the need to study issues in the manager's own professional activity);
- cognitive (ability to operate with methods and technologies of information extraction from scientific theory and practice in order to identify contradictions and problems that exist in business practice (business processes and management systems); ability to develop a methodological apparatus for studying business practices (business processes and management systems), the ability to develop stages of the experiment of studying business practice (business processes and management systems), the ability to determine the theoretical and practical significance of the results, evaluation, generalization and publication of research results, the ability to implement methods of generalization and publication of research results;
- operational and technological (ability to collect, study theoretical and practical information, highlight the contradictions and issues existing in business practice (business processes and management systems), the ability to form goals and objectives of the research; to perform modeling in research of business processes and management systems; ability to develop a program of experimental research of business processes and management systems, ability to assess the theoretical and practical significance of research results of their generalization and publication (scientific and research report, abstract, scientific article, report, monograph, etc.), ability to generalize and publish results research work (report on research work, abstract, scientific article, paper, monograph, etc.);
- reflexive (attitude towards oneself as a research actor; the ability to assess the effectiveness of personal research skills in the professional activities of the manager; the ability to evaluate the results of research in personal research; the ability to assess the personal researcher's qualities in personal research);
- personal (independence, self-discipline, critical thinking). Thus, the third stage of the development of qualimetric tools for measuring the level of formation of research competence has been performed, namely, certain factors and criteria have been presented.

The next stage of the study is to identify the system of weighting of factors and criteria. In accordance with the theoretical provisions of the qualimetric approach, the specific values of weights of factors and criteria are determined by expert methods (questionnaires, surveys, etc.) [11]. Among them, in the current context, the most promising, as noted by O. Subetto, is the method of group expert assessments (GEA) as the most objective and standardized. Within this method, pedagogical examination (e.g. questionnaires, tests) is carried out according to a certain algorithm by a group of specially selected experts (teachers, graduates, employers' representatives) with a preliminary assessment of their competence, consistency and number, which ensures a specified measurement error and level of significance [11].

Thus, we present an algorithm for implementing the method of expert assessments in the determining the significance of factors and criteria for measuring the level of formation of research competence. The sequence of actions is as follows:

- 1) identifying a group of experts;
- 2) identifying the competence of each expert;
- 3) determining the optimal number of experts;
- 4) final formation of a group of experts.

We recommend including the following specialists into the expert group, which will determine the significance of factors and criteria of the research competence model: teachers of higher education institutions; specialists of enterprises, organizations and institutions (heads of top, middle and lower management). The competence of the expert can be assessed in the following ways [2;9;12]: on the basis of self-assessment; assessment of the results of the past work of the expert; special testing; assessment of each expert by the group (if the group members know each other).

Consider the method of regulated self-assessment as the simplest one. Thus, in the process of self-assessment, each expert identifies his or her awareness of the problem raised, on the following scale: 0 - not familiar; 1 - 3 - the problem is not within the scope of his/her specialization; 4 - 6 - the issue is within the scope of his/her specialization, but the expert is not directly involved in solving problems on the issue; 7 - 9 - the expert is involved in solving problems on the issue, but this issue is not within the scope of his/her specialization; 10 - the expert specializes in the issue, has theoretical knowledge and practical experience in its solution [1]. The coefficient of competence of the  $j$ -th expert  $K_j$  is determined by dividing the obtained self-assessment value by 10 points. The analysis of self-assessment allows making a more reasoned conclusion about the inclusion of the expert in the group. Furthermore, the results of self-assessment are indicative not only of the expert's real knowledge in a particular field, but also of his/her ability to critically (objectively) assess their own abilities [1].

Studies [10;12] have shown that an increase in the number of experts in a group, starting at a certain point, leads to an increase in examination error. Therefore, if it is possible to determine the competence of experts, it is advisable to include in the expert group no more than 10 - 15 most competent experts. After the final formation of the group of experts, they are asked to determine the weights of factors and criteria of the research competence model.

The next stage is to combine the identified factors and their components. At the same time, note that based on the results of experimental work the following indicators have been identified:  $K_1 = 0.2$  ( $k_{1.1} = 0.32$ ;  $k_{1.2} = 0.34$ ;  $k_{1.3} = 0.34$ );  $K_2 = 0.2$  ( $k_{2.1} = 0.1$ ;

k2.2 = 0.2; k2.3 = 0.3; k2.4 = 0.3; k2.5 = 0.1); K3 = 0.2 (k3.1 = 0.1; k3.2 = 0.2; k3.3 = 0.3; k3.4 = 0.2; k3.5 = 0.2); K4 = 0.2 (k4.1 = 0.2; k4.2 = 0.2; k4.3 = 0.3; k4.4 = 0.3); K5 = 0.2 (k5.1 = 0.34; k5.2 = 0.33; k5.3 = 0.33). By grouping the identified factors and indicating the obtained coefficients, we obtain a complete qualimetric model for assessing the research competence of future managers.

**The procedure of the experiment and its discussion.**

The study was conducted on the basis of the Ukrainian Academy of Engineering and Pedagogy, Kharkiv, Kharkiv region, Ukraine. The respondents were 72 master’s students majoring in management. The representativeness of the sample is due to the fact that the total number of master’s students majoring in this specialty is 120 students, i.e. the sample is 63% of the total. The number of experts was calculated and amounted to 10 teachers. The experimental technology was introduced into the course „Methodology and organization of scientific research.”

Validity and reliability of the research was ensured by the fact that the assessment of the components of research competence of managers was verified by several methods, namely monitoring (implemented by students themselves) and pedagogical experiment. The implementation of these methods allowed obtaining the same results.

The first stage of monitoring the formation of research competence of future managers was at the beginning of the semester, at the beginning of the study of the course „Methodology and organization of research”. The developed factor-criteria model of research competence of managers was used as a tool for monitoring. In general, the factor-criteria model is a table that includes all factors and criteria. For illustration purposes, certain components are given in Tables 1, 2, 3, 4 and 5.

Table 1. Motivational and value factor and criteria for its evaluation

Factor	Weighting factor	Criterion	Criterion weighting factor	Score
1. Motivational and value	0,2	1.1 Awareness of the role of the research component of professional activities for their own innovative research and discoveries on management issues	0,32	
		1.2 Understanding of the importance of research in the business area	0,34	
		1.3. The need to study the issues in the manager’s own professional activity	0,34	

Consider the content of the cognitive factor and the criteria for its evaluation, the results are given in table 2.

Table 2. Cognitive factor and criteria for its evaluation

Factor	Weighting factor	Criterion	Criterion weighting factor	Score
2. Cognitive	0,2	2.1 Ability to operate with methods and technologies of information extraction from scientific theory and practice in order to identify contradictions and issues existing in business practice (business processes and management systems)	0,1	
		2.2 Ability to develop a methodological apparatus for the study of business practice (business processes and management systems)	0,2	
		2.3 Ability to develop stages of the experiment of business practice research (business processes and management systems)	0,3	
		2.4 Ability to determine the theoretical and practical significance of the results	0,3	
		2.5 Ability to implement ways to generalize and publish research results	0,1	

Consider the content of the operational and technological factor and the criteria for its evaluation, the results are given in table 3.

Table 3. Operational and technological factor and criteria for its evaluation

Factor	Weighting factor	Criterion	Criterion weighting factor	Score
3. Operational and technological	0,2	3.1 Ability to collect, study information on theory and practice, highlight the contradictions and issues existing in business practice (business processes and management systems)	0,1	
		3.2 Ability to form the goals and objectives of the study; to perform modeling in research of business processes and management systems	0,2	
		3.3 Ability to develop a program of experimental research of business processes and management systems	0,3	
		3.4 Ability to assess the theoretical and practical significance of research results	0,2	
		3.5 Ability to generalize and publish the results of research (report on research work, abstract, scientific article, paper, monograph, etc.)	0,2	

Consider the content of the reflexive factor and the criteria for its evaluation, the results are given in table 4.

Table 4. Reflexive factor and criteria for its evaluation

Factor	Weighting factor	Criterion	Criterion weighting factor	Score
4. Reflexive	0,2	4.1 Attitude towards oneself as a research actor	0,2	
		4.2 Ability to assess the effectiveness of the use of personal research skills in the professional activities of the manager	0,2	
		4.3 Ability to evaluate the results of research work in personal research	0,3	
		4.4 Ability to assess the personal qualities of the researcher in personal research activities	0,3	

Consider the content of the personal factor and the criteria for its evaluation, the results are shown in table 5.

Table 5. Personality factor and criteria for its evaluation

Factor	Weighting factor	Criterion	Criterion weighting factor	Score
5. Personal	0,2	5.1 Independence	0,34	
		5.2 Self-discipline	0,33	
		5.3 Critical thinking	0,33	

Scoring of each criterion was carried out by students majoring in „Management”. In the assessment, they followed such scale: 0 points - not manifested; 0.25 - is manifested, but very rarely; 0.5 - is manifested in most cases; 0.75 - is manifested frequently; 1 - is manifested constantly. The assessment of the factor was determined by the sum of points for each criterion (product of weighting factor and score). The final assessment of competence was determined by the formula:

$$K_{com.} = O1 + O2 + O3 + O4 + O5 \quad (1)$$

where O1 – 1<sup>st</sup> factor score; O2 – 2<sup>nd</sup> factor score; O3 – 3<sup>d</sup> factor score; O4 – 4<sup>th</sup> factor score; O5 – 5<sup>th</sup> factor score 5.

The general results of the assessment of the formation of research competence were measured on the scale: 0 - 0.35 - inadmissible level; 0.35 - 0.6 - critical (low) level; 0.6 - 0.75 - sufficient (average) level; 0.75 - 0.9 - high (above average) level; 0.9 - 1 - excellent (very high, with honors) level. According to the assessment, it was equal to 0.52, which indicated a critically low level. Graphical representation of the results is given in Fig.1.



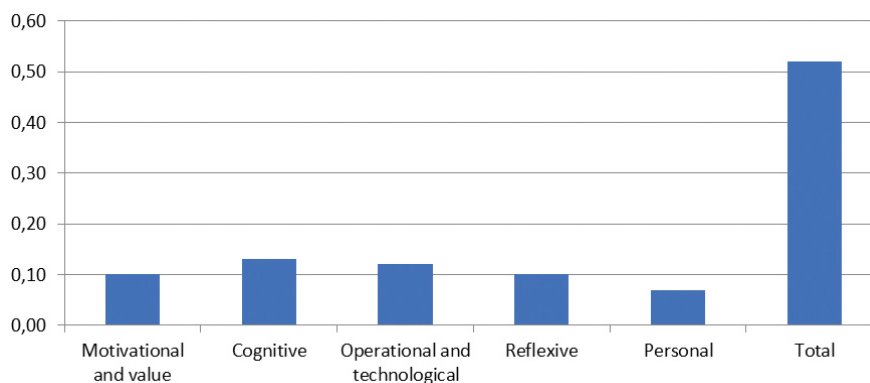


Fig.1. Results of the first assessment of the formation of research competence; Source: own design based on the first stage of the study carried out at the Ukrainian Engineering and Pedagogical Academy

The analysis of the results showed that the average level of research competence (on average per group) is at a low level. Consider the level of formation for each component. The highest level of 0.16 was determined for the motivational and value component, the average levels (from 0.09 to 0.1) were obtained for cognitive, operational-technological and reflexive components and the lowest - 0.07 - 0 for reflexive. The obtained results allowed determining the formation of research competence of students at the first stage of monitoring.

The second stage of monitoring was carried out after studying the first module of the course „Methodology and organization of scientific research”. The tool of the second assessment is the factor-criteria model of research competence of managers, the same as in the first stage. Based on the results of the assessment, the formation of research competence was equal to 0.6, which indicated a sufficient (average) level.

The third stage of monitoring was carried out shortly before the exam in the course „Methodology and organization of scientific research”. Based on the results of the assessment, the formation of research competence was equal to 0.8, which indicated a high (above average) level. Graphical representation of the results is shown in Fig.2.

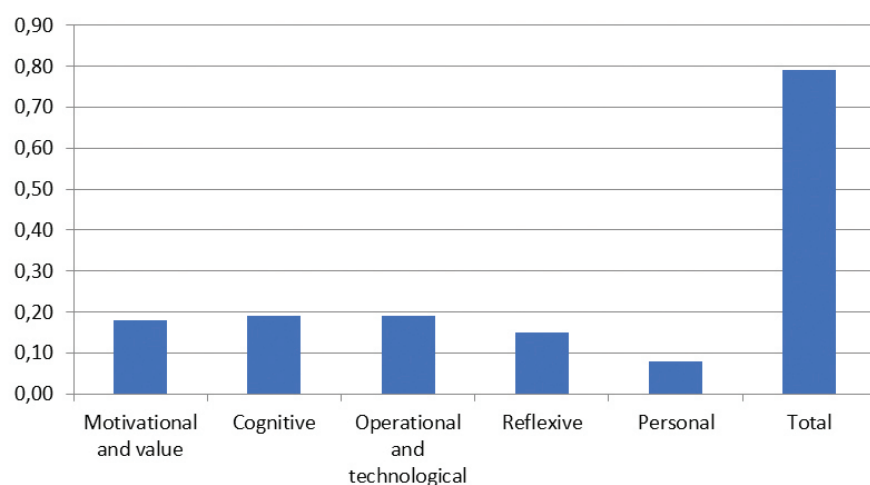


Fig.2. Results of the third assessment of the formation of research competence; Source: own design based on the first stage of the study carried out at the Ukrainian Engineering and Pedagogical Academy

The analysis of the results of the third assessment showed that the average level of research competence is at a high (above average) level. Consider the changes for each component. The level of motivational and value component has changed from 0.10 to 0.18 (11%). This indicates that students are aware of the role of the research component of professional activities for their own innovative research and discoveries on management issues; understanding the importance of research issues in business; the needs to study the issues in the manager's own professional activity. The cognitive component has changed from 0.13 to 0.19 (11%). This indicates that students have the ability to operate with methods and technologies to extract information on scientific theory and practice in order to identify contradictions and issues existing in business practice; ability to develop the methodological apparatus of the study; knowledge of the development of the stages of the experiment; the ability to identify the theoretical and practical significance of the results; the ability to use methods of generalization and publication of results. The operational and technological component has changed from 0.12 to 0.19 (11%). This indicates that students have the ability to collect, study information on theory and practice, to identify contradictions and issues existing in business practice; ability to form the goals and objectives of the study; to perform modeling in research of business processes and management systems; ability to develop an experimental program of research of business processes and management systems; ability to assess the theoretical and practical significance of the results of the study of their generalization and publication (report on research work, abstract, scientific article, paper, monograph, etc.); skills to generalize and publish the results of research work (research report, abstract, scientific article, paper, monograph, etc.). The reflexive component has changed from 0.10 to 0.15 (30%). This indicates that students have the skills to: assess the effectiveness of the use of personal research knowledge and skills in the professional activities of the manager; evaluate the results of research work in personal research activities; assess the personal qualities of the researcher in personal research activities. The personal component has changed from 0.07 to 0.08 (12%), which indicates the formation of students' independence, self-discipline and critical thinking. The results of the empirical study allowed identifying a significant difference in the average level of formation of research competence of future managers (the first stage of monitoring - 0.52, the third stage of monitoring - 0.8). The results of monitoring the formation of research competence of future masters-managers are given in table 6.

Table 6. Results of monitoring the formation of research competence of future masters-managers

Item No.	Components of research competence	Stages of monitoring		
		first	second	third
1.	motivational and value	0,10	0,14	0,18
2.	cognitive	0,13	0,15	0,19
3.	operational and technological	0,12	0,13	0,19
4.	reflexive	0,10	0,12	0,15
5.	personal	0,07	0,06	0,08
Total		0,52	0,6	0,8

Analysis of the data obtained at different stages of monitoring the formation of research competence allows us to confidently recognize the positive dynamics of its development.

The next stage of the study was to determine the objectivity of the results, i.e. that the monitoring contributed to the formation of research competence of managers.

The survey was conducted among students of experimental groups. The results are given in table 7.

Table 7. Analysis of student survey results

Item No.	Question	Response options	Number of respondents	%
1.	Did the monitoring help inform you about the components of the manager's research competence?	Yes	38	53
		Rather yes than no	25	35
		Rather no than yes	6	8
		No	3	4
2.	Did the monitoring ensure identification of the dynamics of the formation of research competence in you?	Yes	35	48
		Rather yes than no	23	32
		Rather no than yes	10	14
		No	4	6
3.	Did the monitoring allow identifying „gaps” in the study of the course?	Yes	29	40
		Rather yes than no	25	35
		Rather no than yes	16	22
		No	2	3
4.	Is the factor-criteria model an effective means of monitoring?	Yes	31	43
		Rather yes than no	24	33
		Rather no than yes	15	21
		No	2	3

The analysis of the obtained results allows us to recognize that 53% of students note that monitoring helps inform about the components of research competence; 48% indicate that monitoring has ensured identification of the dynamics of the formation of research competence; 40% of students emphasize that monitoring helped to identify „gaps” in the study of the course (formed abilities and skills); The effectiveness of the factor-criteria model as a means of monitoring was recognized by 33% of respondents in the experimental groups.

Thus, the use of the monitoring system allowed ensuring the formation of research competence of future managers. The use of the factor-criteria model allows students to independently determine the level of formation of the components of their competence and direct them to further study.

## Conclusions

1. Monitoring the quality of education is carried out in order to establish conformity of the actual results of educational activities to its stated objectives, as well as to assess the extent, areas and causes of deviations from the objectives.
2. One of the powerful means of educational monitoring is the factor-criteria model.
3. Factor-criteria model for assessing the formation of research competence of future masters-managers, given in the study, has been developed in accordance with the content of the stages of research work of business practice (business processes and management systems).
4. It has been defined that the monitoring makes it possible to inform students about the dynamics of the formation of research competence; to exercise control over the implementation of the course teaching method chosen by the teacher; to choose methods and techniques of individual influence on the student, which gives grounds to consider monitoring as one of the means of personalization of education.

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## **MONITOROWANIE KSZTAŁTOWANIA SIĘ KOMPETENCJI BADAWCZYCH PRZYSZŁYCH MENEDŻERÓW SZKOLNIC- TWA WYŻSZEGO**

### **STRESZCZENIE**

W artykule przedstawiono wyniki prac nad monitorowaniem kompetencji badawczych w kształceniu studentów szkół wyższych na specjalności zarządzanie. System monitorowania kompetencji badawczych za pomocą narzędzi jakościowych - model czynnikowo-kryterialny, pozwala na uzyskanie następujących wyników: określenie poziomu jej ukształtowania na początkowym etapie; śledzić zmiany i dostosowywać technologie edukacyjne w temacie; umożliwić studentom ćwiczenie samokontroli na ostatnim etapie studiowania dyscypliny. Model budowany jest zgodnie z treścią etapów realizacji badań praktyk biznesowych (procesy biznesowe i systemy zarządzania). Pozwala to „wyposażyć” uczniów w autodiagnostykę jakości kompetencji i jest obiektywnym wskaźnikiem osiągniętych efektów procesu kształcenia.

### **SŁOWA KLUCZOWE**

kompetencje badawcze, monitoring, model czynnikowo-kryterialny

## **МОНИТОРИНГ СФОРМИРОВАННОСТИ ИССЛЕДОВА- ТЕЛЬСКОЙ КОМПЕТЕНТНОСТИ БУДУЩИХ МЕНЕДЖЕ- РОВ В ЗАВЕДЕНИИ ВЫСШЕГО ОБРАЗОВАНИЯ**

### **АННОТАЦИЯ**

В статье представлены результаты работы по мониторингу исследовательской компетентности в обучении студентов учреждений высшего образования по специальности менеджмент. Система мониторинга исследовательской компетентности средствами квалиметрического инструментария факторно-критериальной модели, позволяет достигнуть таких результатов: определить уровень ее сформированности на начальном этапе; отслеживать динамику формирования и вносить коррективы в образовательную технологию; обеспечить студентов средствами самоконтроля на завершающем этапе изучения дисциплины. Модель построена в соответствии с содержанием этапов реализации исследований бизнес-практики (бизнес процессов и систем управления), что позволяет «вооружить» студентов средствами самодиагностики качества компетентности и является объективным показателем достигнутых результатов образовательного процесса.

### **Ключевые слова**

исследовательская компетентность, мониторинг, факторно-критериальная модель