SPECIAL COMPETENCIES: RESEARCH COMPETENCY

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Abstract. The paper emphasizes the problem, the role, and the significance of developing a prospective specialist's research competence. The proposed model's conceptual foundation is made up of systemic, personality-oriented, activity-based, cognitive, heuristic, and axiological methods. The definitions of «competence,» «competence,» and «research competence» are all considered. The author's comprehension of future specialists' research competency is demonstrated. It is made up of four parts: motivational, cognitive, activity-oriented, and reflexive. It is offered a structural and functional model of research competency formation. The pedagogical circumstances for student research competency formation are established. The use of this methodology will improve the university's research process.

Keywords: competence, research, research competence, special competencies.

МАХСУС КОМПЕТЕНТЛИК: ТАДҚИҚОТ КОМПЕТЕНЦИЯСИ

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Аннотация. Мақолада бўлажак мутахассиснинг тадқиқот қобилиятини шакллантириш муаммоси, роли ва аҳамиятига эътибор қаратилган. Таклиф этилаётган моделнинг концептуал асосини тизимли, шахсга йўналтирилган, фаоллик, когнитив, эвристик ва аксиологик усуллар ташкил этади. «Компетенция», «компетентлик» ва «изланиш компетенцияси» тушунчалари кўриб чиқилади. Муаллифнинг бўлажак мутахассисларнинг тадқиқот малакасини тушуниши кўрсатилган. У тўрт қисмдан иборат: мотивацион, когнитив, фаоллик ва рефлексив. Тадқиқот компетенциясини шакллантиришнинг таркибий-функционал модели таклиф этилади. Талабаларнинг тадқиқотчилик компетенциясини шакллантириш учун педагогик шарт-шароитлар яратилган. Ушбу методологиядан фойдаланиш университетнинг илмий-тадқиқот жараёнини яхшилайди.

Калит сўзлар: компетенция, тадқиқот, тадқиқот компетенцияси, махсус компетенциялар.

СПЕЦИАЛЬНАЯ КОМПЕТЕНЦИЯ: ИССЛЕДОВАТЕЛЬСКАЯ КОМПЕТЕНЦИЯ

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Аннотация. В статье акцентируются проблема, роль и значение формирования исследовательской компетентности будущего специалиста. Концептуальную основу предлагаемой модели составляют системный, личностно-ориентированный, деятельностный, когнитивный, эвристический и аксиологический методы. Рассмотрены определения «компетентность», «компетентность» и «исследовательская компетентность». Демонстрируется авторское понимание исследовательской компетентности будущих специалистов. Она состоит из четырех частей: мотивационной,

познавательной, деятельностной и рефлексивной. Предложена структурно-функциональная модель формирования исследовательской компетентности. Установлены педагогические условия формирования исследовательской компетентности студентов. Использование этой методологии улучшит исследовательский процесс университета.

Ключевые слова: компетентность, исследование, исследовательская компетентность, специальные компетенции.

Introduction. The term «competency» is closely related to the Latin word «competentia,» which meaning «allowed to judge» or «has the right to speak» (Caupin et al., 2006, p. 9). This concept drew a lot of attention and interest among psychologists in the first half of the twentieth century, which was reflected in the amount of empirical investigations in the psychology area at the time (Shippmann et al., 2000). [2]

Graduates who have obtained academic training must now have a certain set of competencies that distinguish them as a person and an expert. General cultural competence is defined as a degree of education sufficient for self-study and independent solution of developing cognitive difficulties, allowing a person to determine their own stance. Professional competence is a complex trait of a person that includes the capacity and willingness to employ theoretical and practical knowledge, abilities and skills in professional activity, aspiration to update and refill professional knowledge, and recognition of its significance.

Materials and methods. Graduate competency, on the other hand, encompasses not just professional but also general cultural competence (the ability to independently master new research methods, change the scientific and production profile of professional activity).[1]

Research competency is also viewed in the academic setting as a collection of competences that enable successful mastery of research activities and development in this direction. According to Lukashenko (2011), research competence is «an integral quality of an individual, expressed in readiness and ability to solve research and creative tasks independently, mastery of research technologies, recognition of the value of research skills, and readiness to use them in professional activities.» Analytical and research abilities define it. Furthermore, Lukashenko distinguishes between executive research competences and research competences, which he considers to be the essence of research competency [6].

Analysis and Discussion. Research competencies include the ability to:

- see and formulate the problem, determine the purpose of the research work;
- understand and justify the relevance, novelty, theoretical and practical significance of research problems;
- to put forward and justify hypotheses, to plan a solution, using ready and own algorithms and schemes;
- independently master new research methods, acquire knowledge, including with the help of information technologies;
- conduct research using ready-made or self-developed program;
- present the results of own work or known scientific achievements. [1]

Other, more particular competences targeted at the development of diverse fields of activity and personality (axiological, personal growth, general cultural, socio-labor, educational-cognitive, communicative, informational) are included in research competence (Khutorskoy, 2003). [3]

Future experts' research competency evolves in response to their professional interests, needs, and level of motivation. Only future professionals whose personal educational experience involves autonomous research activities achieve a high level of development in research competency.

The review of scientific literature suggests an emphasis on the development of autonomous theoretical and experimental work abilities, modern methodologies of scientific research, and experimental approaches in student research activities (Koldina, 2009; Markova, 2003). [4,5]

Research competence necessitates a systematic approach to the application of the ability to record observed phenomena, analyze data, make generalizations and conclusions, clarify and adjust them in response to the emergence of new data, changes in scientific approaches, or clarification of the hypothesis. Based on the theoretical analysis, we can conclude that research competency is a set of research activities, a person's preparation for effective educational and research activities, and active cognitive activity in order to search for knowledge to solve problems. [1]

Based on Leontiev's activity model (2005), the CIS education system has developed a list of key components of research competence: cognitive, motivational, orientational, and operational. The authors evaluate the topic of research capacity in light of several theoretical approaches to general professionology (Zeer, 2004; Turchinov, 1998; Shadrikov, 2004). [7, 8, 9]

Nabieva (1999) defines the following research competency components: Motivational component - the need to develop research competence; cognitive component - knowledge of the essence and purpose of pedagogical monitoring, reflection, and facilitation; performance-operational component - the ability to study, analyze, and predict the outcomes of activity in order to promote individual activity and performance. [10]

Gubaidullin (2011) incorporates value-oriented, project-creative, subject-transformative, and control-corrective components into the research competency framework.

Komarova (2008) specifies three components: a cognitive component that involves intellectual talents such as knowledge extraction, transformation, and construction. Knowledge, expertise, and abilities that enable anticipation and preliminary judgment of study outcomes are included in the predictive component. Knowledge as well as actual skills and abilities to implement a specific scientific method, test, experiment, etc. comprise the organizational component.

Gorova and Fetisova (2014) broaden the approach to describing the structure of research competency by including communicative and reflective components alongside motivational and axiological, cognitive, efficient-operational, and creative components.

Zeer (2004) characterizes research competency as having motivational, cognitive, action, and reflexive components.

The following research skills are at the core of the activity-based component: the ability to navigate in the subject area of the research; problematization, or the ability to identify and understand the research problem; planning of research activities; and data collection, analysis, and interpretation during the research.

The reflective component is the ability to study the outcomes of one's action and to assess the product of that activity [8].

Conclusion. As a result, the development of research competency plays a significant role in the educational process, both during and after school hours. Research competence is a method of obtaining new knowledge, serving as a guide in selecting the direction of their actions, a means of self-knowledge and self-improvement, and a support for self-realization and self-affirmation through the use of this knowledge [9].

In order to build future professionals' research competence in many domains, it will be required to consider novel forms and techniques of educational process organization in the future. This is because the implementation of a competency-based approach in higher education does not disrupt the traditional educational

system, but rather modernizes it, preserving all of the best that has been inherent in our education since ancient times, such as scientific rigor, activity-personal character, and graduate competitiveness [10].

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