

“Ilmiy tadqiqotlarni amaliyotga joriy qilishning muammo va yechimlari” mavzusidagi onlayn xalqaro ilmiy-amaliy anjuman materiallar to‘plami. NamDU - 2026-yil 20-21-fevral
UNDERSTANDING RESEARCH AND RESEARCH COMPETENCE: SIGNIFICANCE AND BENEFITS

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Abstract. This article examines the concepts of research and research competence, clarifying their definitions, core characteristics, and professional significance. Drawing on a synthesis of contemporary scholarly literature, the paper analyzes how research is conceptualized as a systematic, rigorous, and purposeful process aimed at generating reliable knowledge and solving problems. It further explores research competence as a multidimensional construct integrating knowledge, cognitive abilities, practical skills, motivation, and personal attributes necessary for effective research practice. The review identifies strong consensus across studies regarding the integrative nature of research competence, despite variations in structural frameworks and component classifications. Additionally, the article highlights the educational and professional benefits of developing research competence, including enhanced critical thinking, communication skills, motivation, academic achievement, and career readiness. Particular attention is given to its importance in graduate and postgraduate education as a foundation for evidence-based practice and innovation. The findings confirm that fostering research competence is essential for quality education, professional excellence, and sustainable knowledge-based development.

Key words: research, research competence, higher education, graduate education, critical thinking, professional development, lifelong learning, evidence-based practice

Аннотация. В статье рассматриваются понятия исследования и исследовательской компетентности, уточняются их определения, ключевые характеристики и профессиональное значение. На основе синтеза современной научной литературы исследование анализируется как систематический, строгий и целенаправленный процесс, направленный на получение достоверных знаний и решение проблем. Далее исследовательская компетентность рассматривается как многомерная структура, объединяющая знания, когнитивные способности, практические навыки, мотивацию и личностные качества, необходимые для эффективной исследовательской деятельности. В ходе анализа выявлен высокий уровень согласия в научных источниках относительно интегративного характера исследовательской компетентности, несмотря на различия в структурных моделях и классификациях её компонентов. Кроме того, в статье подчеркиваются образовательные и профессиональные преимущества развития исследовательской компетентности, включая развитие критического мышления, коммуникативных навыков, мотивации, академической успешности и профессиональной готовности. Особое внимание уделяется её значимости в магистратуре и аспирантуре как основе для практики, основанной на доказательствах, и инновационной деятельности. Полученные результаты подтверждают, что формирование исследовательской компетентности является необходимым условием обеспечения качества образования, профессионального совершенства и устойчивого развития, основанного на знаниях.

Ключевые слова: исследование, исследовательская компетентность, высшее образование, магистратура, критическое мышление, профессиональное развитие, обучение на протяжении всей жизни, практика, основанная на доказательствах.

Annotatsiya. Ushbu maqola tadqiqot va tadqiqot kompetensiyasi tushunchalarini ko‘rib chiqadi, ularning ta‘riflari, asosiy xususiyatlari va kasbiy ahamiyatini aniqlashtiradi. Zamonaviy ilmiy adabiyotlar tahliliga asoslanib, maqolada tadqiqot ishonchli bilimlarni yaratish va muammolarni hal etishga qaratilgan tizimli, izchil va maqsadga yo‘naltirilgan jarayon sifatida talqin etiladi. Shuningdek, tadqiqot kompetensiyasi samarali tadqiqot faoliyati uchun zarur bo‘lgan bilimlar, kognitiv qobiliyatlar, amaliy ko‘nikmalar, motivatsiya va shaxsiy sifatlarni o‘zida mujassam etgan ko‘p o‘lchovli tuzilma sifatida yoritiladi. Tadqiqotlar orasida tadqiqot kompetensiyasining integrativ tabiati borasida kuchli umumiylik mavjudligi aniqlangan bo‘lsa-da, uning tarkibiy tuzilmasi va komponentlari tasnifida ayrim farqlar kuzatiladi. Bundan tashqari, maqolada tadqiqot kompetensiyasini rivojlantirishning ta‘limiy va kasbiy afzalliklari, jumladan, tanqidiy fikrlash, muloqot ko‘nikmalari, motivatsiya, akademik

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muvaffaqiyat va kasbiy tayyorgarlikni oshirishdagi roli yoritiladi. Ayniqsa, magistratura va doktorantura bosqichida uning dalillarga asoslangan amaliyot va innovatsiyalar uchun asos bo‘lishi alohida ta’kidlanadi. Natijalar tadqiqot kompetensiyasini shakllantirish sifatli ta’lim, kasbiy mukammallik va barqaror bilimga asoslangan rivojlanish uchun muhim ekanligini tasdiqlaydi.

Kalit so‘zlar: tadqiqot, tadqiqot kompetensiyasi, oliy ta’lim, magistratura ta’limi, tanqidiy fikrlash, kasbiy rivojlanish, uzluksiz ta’lim, dalillarga asoslangan amaliyot.

Introduction

Understanding research and developing research competence have long been important priorities in many international educational systems. In today’s knowledge-based world, research is not limited to universities or scientific institutions; it plays a central role in innovation, professional development, and evidence-based decision-making. The ability to conduct, evaluate, and apply research has therefore become an essential competence for academics and practitioners alike.

At the same time, research and research competence are often misunderstood. Research is sometimes perceived as overly complex or reserved only for experienced scholars, while research competence is reduced to technical skills such as data collection or statistics. Such misconceptions may discourage novice researchers and educators from engaging in research activities.

Therefore, clarifying the meaning of research and research competence is essential. A clear understanding can help reduce misconceptions, foster positive attitudes toward inquiry, and highlight the professional and academic benefits of becoming a competent researcher.

Definitions and Characteristics of Research

Multiple scholars defined research in slightly different but closely related ways. Several authors describe research as structured and time-consuming process aimed at answerin specific questions (Anol Bhattacharjee et al., (2019). This perspective highlights that research does not happen instantly, rather, it requires careful planning, systematic procedures, and sustained effort. Similarly, Mugo Fridah et al., (2022) view research as an in-depth and comprehensive investigation that seeks discovery and deeper understanding. This definition stresses the exploratory and knowledge-building nature of research. Other scholars focus on the problem-solving dimension of research. For example, Ghanad et al. (2023) characterize research as a methodical approach to addressing specific problems. More studies support near conclusion. In the same line, Deb et al. (2018) define research as a systematic process of hypothesis formulation and testing them through organized procedures. These perspectives underline the logical and evidence-based structure of research activities.

Additionally, Cain et al. (2018) emphasize that research must demonstrate significance, originality and rigor. This definition moves beyond process and highlights the quality standarts that distinguish scholarly research from ordinary inquiry. Other scholars similarly describe research as a systematic investigation conducted to establish facts and generate reliable knowledge (Aruna Anchal et al., 2022).

Taken together, these definitions show that research is not merely information gathering. Rather, it is a systematic, rigorous and purposeful process aimed at solving problems, testing ideas, discovering new knowledge, and producing meaningful and reliable findings. Despite differences in wording, the core elements across studies consistently include systematic procedures, clearly defined questions or problems, hypothesis development or investigation, and the generation of trustworthy knowledge.

Definitions and Components of Research Competence

Research competence is widely understood as a comprehensive and integrated personal quality that enables an individual to conduct research effectively and produce new knowledge. Most scholars agree that it is not limited to a single skill or ability. Instead, it combines knowledge, practical skills, cognitive abilities, experience, and personal attitudes that together support successful research activity.

Several studies show strong agreement on this general understanding. For example, Nancy Jose et al. (2023) define research competence as the set of knowledge, skills, and abilities necessary to conduct research effectively. Similarly, Olena Bida et al. (2022) describes it as a holistic and integrative quality that includes not only technical skills but also personal characteristics and research experience. Supporting this shared perspective, Shcherban et al. (2021), after reviewing more than 260 national and international sources, confirm that research competence is consistently viewed as a complex and multidimensional construct.

Although there is broad agreement about its overall nature, scholars differ in how they structure its components. Some researchers provide detailed frameworks. For instance, Prosekov et al. (2020) identify motivational, cognitive, operational, and personal components. Bide et al. (2022) propose an

even more detailed model, distinguishing seven components such as cognitive, procedural, communicative, and professional-reflective dimensions. These variations show that while the core remains stable, researchers organize and categorize the elements differently.

In specific contexts, such as pre-service teacher education, some differences become more visible. Matjašič et al. (2024) note that there is still no full consensus on the exact definition of research competence in this field. However, they highlight critical thinking, self-directed learning, and organizational skills as key elements, which align with broader understanding found in other studies.

Overall, the reviewed studies demonstrate clear agreement that research competence is multifaceted, integrative and essential for professional growth. Despite differences in how its components are grouped or labeled, researchers consistently recognize it as a complex combination of knowledge, skills, attitudes, and personal qualities necessary for effective research practice.

Benefits and Professional Significance of Research Competence

Research competence plays a crucial role in professional practice, lifelong learning, and the advancement of knowledge. Many studies across different disciplines show that developing research competence brings significant benefits for students and professionals. It supports critical thinking, improves communication skills, increases motivation, and enhances overall academic and professional performance.

Several scholars highlight these advantages in detail. Weston et al. (2017) describe research skills as essential for discovery, innovation, and knowledge transfer, emphasizing their role in building evidence-based professional practice. Petrella et al. (2008) found that participation in research activities fosters independent critical thinking and significantly improves students' ability to communicate ideas clearly and effectively. Prosekov et al. (2020) report that developing research competence increases students' intrinsic motivation and enhances key cognitive processes such as planning, systematization, and structured thinking. Similarly, Matjašič et al. (2024) argue that strengthening research competence contributes directly to improving the overall quality of education. Duche-Pérez et al. (2024) further emphasize that research competence is essential not only for academic success but also for long-term professional development and adaptability in changing professional environments. Research skills are described as fundamental for building evidence-based professional practice and for promoting discovery and innovation (Weston et al., 2017). Other scholars emphasize that research competence is a key factor in academic success and future career development, particularly within European education strategies (Angeloska-Galevska et al., 2024). Some researchers view research competence as a final outcome of higher education, integrating motivational, cognitive, operational, and personal components (Prosekov et al., 2020). Empirical findings also show that engaging in research increases students' intellectual activity, creativity, and cognitive abilities (Alipina et al., 2023). Furthermore, postgraduate education plays a strategic role in ensuring the continuity and quality of academic and professional expertise (Stroková et al., 2018).

In conclusion, research competence is a key factor in academic success, professional development, and knowledge advancement. Across multiple disciplines, studies consistently show that developing research competence strengthens critical thinking, communication skills, motivation, creativity, and overall cognitive development. It supports evidence-based professional practice, fosters innovation, and contributes to higher quality education.

Moreover, research competence is widely recognized as an essential outcome of higher education, integrating cognitive, motivational, and practical components. Its development not only benefits individual learners but also ensures the continuity, quality, and progress of academic and professional communities. Overall, the evidence clearly confirms that research competence is fundamental for lifelong learning, career advancement, and societal development.

Conclusion

This article has clarified the meaning and importance of research and research competence. Research is consistently defined as a systematic, purposeful, and rigorous process aimed at solving problems, generating new knowledge, and supporting innovation. Although definitions vary slightly, scholars agree that research requires clear questions, structured procedures, and evidence-based reasoning.

Research competence, in turn, is understood as a multifaceted and integrated quality that combines knowledge, skills, critical thinking, motivation, and personal attributes. It goes beyond technical abilities and includes reflection, communication, and independent inquiry. Despite differences in how its components are categorized, there is strong agreement that research competence is essential for effective research practice

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The literature clearly demonstrates that developing research competence strengthens academic performance, enhances professional readiness, supports evidence-based practice, and promotes lifelong learning. It contributes not only to individual growth but also to the advancement of education, innovation, and society as a whole.

In sum, understanding research and fostering research competence is not optional; it is a strategic necessity for quality education, professional excellence, and sustainable knowledge development.

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