

Моя профессиональная
карьера

ISSN

INTERNATIONAL
STANDARD
SERIAL
NUMBER

ISSN

2782-4365

Проверить
номер:



Научно-образовательный электронный журнал

ОБРАЗОВАНИЕ И НАУКА В XXI ВЕКЕ

Выпуск №79-3 (том 5)
(октябрь), 2026)

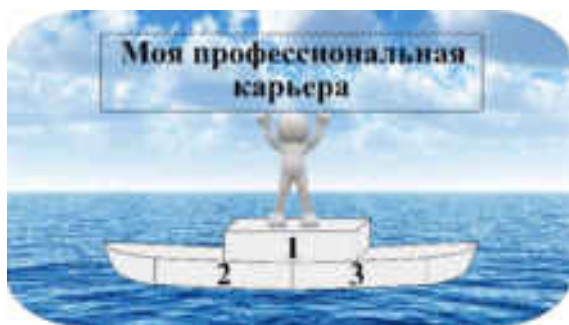


Google
Scholar



Периодичность выпуска: 1 раз в неделю

Сайт: mpcareer.ru/oinv21veke. Почта: obrmprcareer@mail.ru



Международный научно-образовательный
электронный журнал
«ОБРАЗОВАНИЕ И НАУКА В XXI ВЕКЕ»

ISSN 2782-4365

УДК 37

ББК 94

**Международный научно-образовательный электронный журнал
«ОБРАЗОВАНИЕ И НАУКА В XXI ВЕКЕ». Выпуск №79-3 (том 5) (октябрь,
2026). Дата выхода в свет: 19.10.2026.**

Журнал объединяет авторов на территории стран СНГ и помогает обмениваться передовыми научно-образовательными исследованиями.

Содержит научные работы отечественных и зарубежных авторов по экономическим, техническим, философским, юридическим и другим наукам.

Миссия научно-образовательного электронного журнала «ОБРАЗОВАНИЕ И НАУКА В XXI ВЕКЕ» состоит в поддержке интереса читателей к оригинальным исследованиям и инновационным подходам в различных тематических направлениях, которые способствуют распространению лучшей отечественной и зарубежной практики в интернет пространстве.

Целевая аудитория журнала охватывает работников сферы науки и образования (педагоги, учителя, ученые, преподаватели, научные сотрудники, бакалавры, магистранты, аспиранты).

Материалы публикуются в авторской редакции. За соблюдение законов об интеллектуальной собственности и за содержание работ ответственность несут авторы работ. Мнение редакции может не совпадать с мнением авторов научных работ. При использовании и заимствовании материалов ссылка на издание обязательна.

© ООО «МОЯ ПРОФЕССИОНАЛЬНАЯ КАРЬЕРА»

© Коллектив авторов

Атабаллыева Гызылгул Гельдимырадовна УСТОЙЧИВОЕ РАЗВИТИЕ ФИНАНСОВОЙ СИСТЕМЫ КАК ФАКТОР ЭКОНОМИЧЕСКОГО РОСТА ТУРКМЕНИСТАНА	344
Байрамова Гозель Союновна УСТОЙЧИВОЕ РАЗВИТИЕ ЭКОНОМИКИ ТУРКМЕНИСТАНА: СОВРЕМЕННЫЕ ПРИОРИТЕТЫ, ВЫЗОВЫ И ПЕРСПЕКТИВЫ	354
Моджеков Акмырат РОЛЬ КОММЕРЧЕСКИХ БАНКОВ В ФИНАНСИРОВАНИИ МАЛОГО И СРЕДНЕГО ПРЕДПРИНИМАТЕЛЬСТВА	364
Розыбаев Бегджан Джумабаевич СОВЕРШЕНСТВОВАНИЕ НАЛОГОВОЙ СИСТЕМЫ ТУРКМЕНИСТАНА В УСЛОВИЯХ ЦИФРОВОЙ ТРАНСФОРМАЦИИ ЭКОНОМИКИ	375
Шамырадова Лачын Атабаевна ТЕКСТИЛЬНАЯ ПРОМЫШЛЕННОСТЬ КАК ФАКТОР ЭКОНОМИЧЕСКОГО РАЗВИТИЯ И ИННОВАЦИОННОЙ МОДЕРНИЗАЦИИ ТУРКМЕНИСТАНА	385
Ханбердыева Бахаргуль Курбангелдыевна, Атаева Дженнет, Аразгельдыева Мая Акмурадовна ЦИФРОВАЯ ТРАНСФОРМАЦИЯ ОБРАЗОВАНИЯ: ОТ ТРАДИЦИОННЫХ МЕТОДОВ ОБУЧЕНИЯ К ИНТЕЛЛЕКТУАЛЬНЫМ ОБРАЗОВАТЕЛЬНЫМ СИСТЕМАМ	393
Бекмаммедова А.Д., Чариев Мердан, Ишангулиев Сердар ПРИНЦИПЫ ОБУЧЕНИЯ И ВОСПИТАНИЯ В СОВРЕМЕННОЙ СИСТЕМЕ ОБРАЗОВАНИЯ	404
Myratgulyeva Aynur THE IMPACT OF FEEDBACK ON STUDENTS' ACADEMIC MOTIVATION AND LEARNING PROGRESS	413
Reyimova Solmaz THE ROLE OF CRITICAL THINKING IN STUDENTS' ACADEMIC AND PROFESSIONAL DEVELOPMENT	422
Мыратдурдыева Нургозель Нурбердиевна МЕЖДУНАРОДНОЕ ПРАВО В СОВРЕМЕННОМ МИРЕ: ПРИНЦИПЫ, МЕХАНИЗМЫ РЕАЛИЗАЦИИ И РОЛЬ ТУРКМЕНИСТАНА В УКРЕПЛЕНИИ МИРА И МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА	430
Рустемова Мелике, Аннабердиев Кувватмырат, Бердиев Мукам, Союнов Сахымырат УЧАСТИЕ ТУРКМЕНИСТАНА В 17-Й КОНФЕРЕНЦИИ СТОРОН КОНВЕНЦИИ ООН О БИОЛОГИЧЕСКОМ РАЗНООБРАЗИИ В ЕРЕВАНЕ	440

ФИО автора(-ов): *Reyimova Solmaz, lecturer of Dovletmamet Azadi Turkmen National Institute of World Languages*

Название публикации: «THE ROLE OF CRITICAL THINKING IN STUDENTS' ACADEMIC AND PROFESSIONAL DEVELOPMENT»

Abstract

Critical thinking is widely recognized as an essential competence in contemporary education and professional life. In a rapidly changing world characterized by the continuous development of information technologies, the expansion of digital communication, and increasing demands on the labour market, students must be able not only to acquire knowledge but also to evaluate information, identify problems, analyse evidence, and make reasoned decisions. This article examines the role of critical thinking in students' academic achievement and professional development. Particular attention is given to the relationship between critical thinking, independent learning, problem-solving, communication, creativity, and decision-making. The article also considers effective pedagogical strategies for developing critical thinking in higher education, including problem-based learning, case studies, classroom discussions, collaborative projects, and reflective activities. It argues that the systematic integration of critical-thinking activities into university teaching can help prepare students for lifelong learning and responsible professional practice.

Keywords: critical thinking, higher education, academic achievement, professional development, problem-solving, independent learning, analytical skills, employability.

Introduction. Modern education is increasingly concerned with developing students' intellectual abilities, practical competencies, and capacity for independent learning. Traditional approaches to education often emphasize the acquisition and reproduction of knowledge. Although factual knowledge remains important, it is not sufficient to prepare students for the complex academic and professional challenges of the twenty-first century. Students must also learn how to interpret information,

distinguish reliable evidence from unsupported claims, consider alternative perspectives, and formulate logical conclusions.

Critical thinking has therefore become an important component of educational development. It enables learners to move beyond memorization and engage actively with the information they encounter. Students who develop critical-thinking skills are better equipped to understand difficult concepts, evaluate arguments, solve problems, and apply theoretical knowledge to practical situations.

The importance of critical thinking extends beyond the university classroom. Employers increasingly expect graduates to demonstrate analytical reasoning, adaptability, effective communication, and the ability to make informed decisions. These competencies are particularly important in fields such as economics, finance, business administration, engineering, information technology, and education, where professional decisions often require the evaluation of complex and sometimes contradictory information.

The purpose of this article is to examine the role of critical thinking in students' academic and professional development and to identify teaching strategies that can support its systematic development in higher education.

Critical thinking can be understood as a purposeful intellectual process involving the analysis, interpretation, evaluation, and reasoned assessment of information. It requires individuals to examine the foundations of their beliefs, assess the quality of evidence, recognize assumptions, and determine whether conclusions are supported by logical arguments.

Facione (1990) identifies interpretation, analysis, evaluation, inference, explanation, and self-regulation as important components of critical thinking. These skills are interconnected and contribute to the development of independent and reflective learners. Interpretation enables students to understand information and identify its meaning. Analysis helps them recognize relationships between ideas, arguments, and evidence. Evaluation involves assessing the credibility of sources and the strength of arguments. Inference allows learners to draw reasonable conclusions from available evidence, while explanation helps them communicate their reasoning

clearly. Self-regulation encourages students to monitor their own thinking, recognize possible errors, and revise their conclusions when necessary.

Critical thinking should not be confused with criticism or the rejection of other people's opinions. A critical thinker does not automatically disagree with information but examines it carefully before accepting or rejecting it. This process requires intellectual curiosity, openness to alternative viewpoints, logical reasoning, and a willingness to reconsider previously held assumptions. Furthermore, critical thinking is not an isolated ability that develops independently of subject knowledge. Students need relevant information and an understanding of the subject area to evaluate arguments effectively. Consequently, higher education institutions should integrate critical-thinking activities into subject-specific teaching rather than treating them only as a separate theoretical topic.

Critical thinking contributes to academic development by helping students become active participants in the learning process. Instead of simply memorizing information presented by lecturers or textbooks, students learn to question ideas, establish connections between concepts, and construct their own interpretations based on evidence. One of its major contributions is the improvement of independent learning. University students frequently work with academic articles, research materials, digital resources, and complex theoretical concepts. The ability to assess the reliability of these materials helps them select relevant information and develop a deeper understanding of their subjects.

Critical thinking is also essential for academic reading and writing. When reading scholarly texts, students must identify the author's central argument, examine supporting evidence, distinguish facts from opinions, and recognize possible limitations. These activities improve comprehension and help learners engage meaningfully with academic discussions. In writing, critical thinking enables students to develop coherent arguments, support claims with appropriate evidence, compare different perspectives, and draw justified conclusions.

Another important aspect is problem-solving. Academic tasks often require students to apply theoretical knowledge to unfamiliar situations. Rather than relying

exclusively on previously memorized solutions, critically thinking students can identify the nature of a problem, consider possible explanations, compare alternative approaches, and select a reasonable solution.

Critical thinking also supports metacognition, which refers to awareness and regulation of one's own thinking. Students who reflect on their learning strategies are better able to identify misunderstandings, recognize their strengths and weaknesses, and adjust their approaches to difficult tasks. Halpern (2014) emphasizes the importance of teaching thinking skills in ways that encourage their application across different situations.

In addition, classroom discussions and collaborative projects create opportunities for students to explain their opinions, evaluate arguments, and respond to different interpretations. Such activities develop both intellectual independence and respect for evidence-based disagreement. However, the development of critical thinking does not occur automatically through university attendance. It requires purposeful instruction, appropriate learning tasks, constructive feedback, and regular opportunities to practise analytical reasoning. Lecturers therefore play a significant role in creating an educational environment in which questioning, investigation, and reflection are encouraged.

The significance of critical thinking becomes particularly evident when students enter the labour market. Professional environments frequently involve complex decisions, competing priorities, incomplete information, and unexpected challenges. Graduates must be able to analyse situations carefully rather than depend entirely on routine procedures or assumptions.

First, critical thinking strengthens professional problem-solving. Employees need to identify the causes of difficulties, evaluate available evidence, and determine which solutions are most appropriate. For example, a finance graduate analysing an organization's financial performance must interpret financial statements, compare indicators, recognize potential risks, and explain the reasons behind changes in profitability. The ability to examine evidence systematically contributes to more informed decisions.

Second, critical thinking improves decision-making. Professionals often have several possible courses of action, each with different advantages and disadvantages. Critical thinkers can compare alternatives, consider potential consequences, assess risks, and justify their choices. This ability is valuable in management, accounting, banking, logistics, education, and many other professional fields.

Third, critical thinking supports effective communication and teamwork. In professional settings, employees must explain ideas clearly, listen to colleagues, assess proposals, and negotiate solutions. Individuals who can support their opinions with evidence are more likely to contribute constructively to group discussions. They are also better prepared to respond to disagreement without allowing personal preferences to replace rational analysis.

Fourth, critical thinking contributes to adaptability and lifelong learning. Technological developments and changes in professional practices require workers to update their knowledge continuously. Graduates who can evaluate unfamiliar information, identify learning needs, and assess new approaches are better positioned to respond to changing professional expectations.

Critical thinking is also closely connected with ethical responsibility. Professional decisions may affect colleagues, clients, organizations, and society. Examining the consequences of different actions, identifying conflicts of interest, and considering alternative viewpoints can help individuals make more responsible choices. Critical thinking alone does not guarantee ethical behaviour, but it provides an important foundation for informed ethical reasoning.

For these reasons, higher education should establish a meaningful connection between academic learning and real professional situations. Students need opportunities to apply analytical skills to realistic problems before they encounter similar challenges in their future careers.

The development of critical thinking requires teaching methods that encourage students to participate actively in learning. Lecturers should design tasks that require analysis, interpretation, evaluation, and the application of knowledge instead of relying exclusively on memorization and reproduction.

Problem-based learning is one useful approach. Students are presented with a complex problem and asked to investigate its causes, identify relevant information, and propose possible solutions. This method encourages independent inquiry and helps learners connect theoretical knowledge with practical situations.

Case-study analysis provides another effective opportunity. Students examine a realistic or carefully constructed situation, identify its central issues, compare possible responses, and justify their recommendations. For example, students studying economics may analyse a company's declining revenue and propose strategies based on financial data and market conditions.

Structured discussions and debates encourage learners to examine different viewpoints and evaluate the strength of supporting arguments. To make these activities productive, lecturers should establish clear expectations: students must listen respectfully, use relevant evidence, distinguish assumptions from facts, and explain the reasoning behind their positions.

Collaborative projects can also promote critical thinking. When students work together, they must compare ideas, assess information, divide responsibilities, and reach decisions. Group activities are particularly effective when each participant is expected to contribute evidence and explain the rationale for proposed solutions.

Reflective learning helps students evaluate their own progress. Short reflective journals, self-assessment tasks, and post-project reviews can encourage learners to consider which strategies were successful, what difficulties they encountered, and how their reasoning could be improved.

Digital technologies provide additional opportunities for critical-thinking development. Students can compare online sources, examine digital data, identify misleading information, and assess the credibility of content generated by artificial intelligence. Nevertheless, access to technology does not automatically produce critical thinking. Students need explicit guidance on verifying sources, recognizing limitations, and using digital tools responsibly.

Assessment practices should also reflect the objectives of critical-thinking instruction. In addition to testing factual knowledge, lecturers can evaluate students'

reasoning, use of evidence, consideration of alternative explanations, and ability to justify conclusions. Rubrics, oral presentations, research assignments, and analytical reports can make these expectations clear.

Importantly, students should receive constructive feedback that explains not only whether an answer is correct but also how their reasoning can be strengthened. A supportive learning environment allows students to ask questions, acknowledge uncertainty, revise mistakes, and learn from alternative perspectives.

Despite its importance, the development of critical thinking may face several challenges in higher education. These include excessive reliance on memorization, limited classroom time, large student groups, insufficient opportunities for discussion, and assessment systems that prioritize factual recall over analytical reasoning. Students may also hesitate to question established ideas when they are accustomed to teacher-centred instruction. In such situations, lecturers need to introduce interactive approaches gradually and explain that respectful questioning is a normal part of academic inquiry.

To address these challenges, higher education institutions should incorporate critical-thinking objectives into course planning, teaching materials, and assessment criteria. Professional development programmes can help lecturers design analytical tasks and evaluate students' reasoning more effectively. It is also important to connect critical thinking with the specific requirements of different disciplines. Finance students can analyse budgets and financial reports; language learners can evaluate arguments in academic texts; engineering students can compare technical solutions; and education students can examine teaching practices and learning outcomes.

Institutions should also encourage interdisciplinary projects that require students to combine knowledge from different subjects. Such experiences can demonstrate that critical thinking is a transferable competence applicable to a wide range of academic and professional contexts. Finally, the effectiveness of critical-thinking initiatives should be evaluated through students' performance on analytical tasks, the quality of their arguments, their ability to use evidence, and their progress in solving unfamiliar

problems. Such evaluation can help educators refine their methods and respond to students' learning needs.

Conclusion. Critical thinking is a fundamental component of students' academic and professional development. It supports independent learning, academic reading and writing, problem-solving, reflective practice, and informed decision-making. In professional life, it contributes to adaptability, effective communication, teamwork, and responsible judgement.

The development of these skills requires more than the transmission of subject knowledge. It calls for educational practices that encourage students to investigate problems, evaluate evidence, consider alternative perspectives, and reflect on their reasoning. Problem-based learning, case studies, discussions, collaborative projects, and reflective assessment can provide meaningful opportunities for this development.

Higher education institutions and lecturers therefore have an important responsibility to create learning environments in which critical thinking is consistently practised and assessed. By integrating analytical activities into subject-specific teaching and connecting academic tasks with real professional challenges, universities can help students become independent learners, competent specialists, and responsible members of society.

References:

1. Ennis, R. H. (2011). The nature of critical thinking: An outline of critical thinking dispositions and abilities. *University of Illinois*. https://education.illinois.edu/docs/default-source/faculty-documents/robert-ennis/thenatureofcriticalthinking_51711_000.pdf
2. Facione, P. A. (1990). *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction. Research Findings and Recommendations*. American Philosophical Association.
3. Halpern, D. F. (2014). *Thought and Knowledge: An Introduction to Critical Thinking* (5th ed.). Psychology Press