



Ethical Aspects of Artificial Intelligence Usage in the Academic Environment

Tamar Vepkhvadze*

Associated Professor, Faculty of Social and Political Sciences, Ivane Javakhishvili Tbilisi State University.

*Corresponding Author
Tamar Vepkhvadze

Associated Professor,
Faculty of Social and
Political Sciences, Ivane
Javakhishvili Tbilisi
State University.

Article History

Received: 08.09.2024

Accepted: 01.10.2024

Published: 11.10.2024

Abstract: The aim of our research is to explore the correlation between artificial intelligence and the academic environment in the context of complying with and upholding academic ethics norms. Today, the ideals of the academic community are undergoing significant changes. The concept and values of the university are being transformed with the introduction and active enforcement of ethical norms. Over the past two decades, ethical regulations have been developed and expanded in universities, professor and student unions, and research institutions: ethical codes have emerged, and ethics committees have been established. International documents regarding the reorganization of higher education also include moral and ethical requirements for the academic community.

In the last twenty years, modern universities and higher education institutions around the world have adopted ethics codes or other documents with ethical content. Universities in the United States, the United Kingdom, Europe, and Asia have implemented ethics regulatory systems, including ethics committees, commissions, applied ethics research centers, complaints centers, and other regulatory mechanisms. Ten to twenty years ago, ethical codes and regulations were rare in universities, but now this trend has become the norm. Most leading universities adopted ethics or conduct codes by the end of the 21st century.

All of these facts indicate that the topic of academic ethics and its practical aspects is highly relevant.

The debate over the values and ideals of the academic community has been ongoing since the Enlightenment. Philosophers of that time reflected on these issues in their works, expressing views on organizational culture, customs, traditions, and the ideals of the academic community (Diderot, Kant). In the 19th and 20th centuries, the idea of the university and its core values became the subject of study for authors such as Fichte, Nietzsche, Humboldt, Fischer, Schopenhauer, Weber, Ortega y Gasset, Heidegger, Derrida, Jaspers, John Dewey, and others.

Simultaneously, the modern stage of society's development, including the academic community, is unfolding alongside the formation of a technological worldview and rapid development. It is noteworthy that, with the diffusion of dynamic technologies and the progress of artificial intelligence (AI), the post-COVID era is promoting the intensive development of new AI tools and their application in various spheres of human life, including education and science.

The Council of Europe defines artificial intelligence as "a combination of sciences, theories, and technologies aimed at replicating human cognitive abilities in machines. Given the current state of development, AI means delegating complex intellectual tasks, traditionally performed by humans, to machines." [1].

AI has become a significant part of the surrounding reality. The rapid increase in research and the high level of interest from the scientific community emphasize the need to develop a general methodology for studying AI as an independent interdisciplinary scientific field. This necessity is driven by the need for a systematic framework to address research problems using the best and most accessible methods available, in line with the goals and objectives of the research. This methodology distinguishes science from the so-called "common sense" of everyday ideas. Building theoretical models is the main strength of science, allowing us to consider the heuristic validation of a theory as a criterion for truth in understanding the adequacy of reality descriptions.

AI technologies are evolving rapidly, becoming popular, and have already been integrated into the educational processes of universities worldwide, including in Georgia. The high quality of work produced by AI tools (such as Chat GPT) has gained popularity among students, leading to its widespread use.

This raises the question: What constitutes AI plagiarism? Can the unauthorized borrowing or use of AI-generated materials be considered plagiarism?

The objective of the research is to examine the aspects that define the academic community's understanding of academic ethics in relation to the problem of plagiarism. Additionally, the study analyzes issues related to copyright ethics and AI-generated plagiarism.

The research aims to highlight the key aspects that shape the understanding of academic society, including students' views on the relationship between artificial intelligence, academic ethics, and academic integrity.

The research questions include: How relevant is the protection of copyright, authorial ethics, and AI plagiarism in the preparation and completion of academic assignments in university settings? What is the general attitude of the academic community toward compliance with authorial ethics and the problem of plagiarism when using AI tools in the academic environment? Are there any standards for preventing AI plagiarism?

Importantly, at the level of individual countries and major tech companies, special bodies are already being established to promote ethical standards in technology. For example, in Europe, there are ethics commissions in the field of AI. The monitoring of ethical standards in specific companies is carried out by individual specialists. In 2021, the first ethical code for AI was developed by leading European companies and universities. Is this approach considered in Georgia's university space?

To answer these questions, the research employs methods of analogy, typological studies, and pragmatic analysis. The study presents recommendations for strengthening the policies of educational institutions regarding copyright ethics protection and AI plagiarism prevention among the academic community and students.

Keywords: Academic Ethics, Artificial Intelligence, Innovation, Technological Progress.

Cite this article:

Vepkhvadze, T., (2024). New Education Policy 2020 and Social Work Interventions. *ISAR Journal of Arts, Humanities and Social Sciences*, 2(10), 23-28.

Article

The goal of our research is to study the correlation between artificial intelligence and the academic environment in the context of compliance with and protection of academic ethics norms.

The objective of the study is to examine aspects that define the understanding of academic ethics in relation to the problem of plagiarism in academic society, as well as the analysis of copyright ethics protection and AI-generated plagiarism issues.

The research aims to highlight key aspects that shape the understanding of academic society, including students' perspectives on the relationship between artificial intelligence, academic ethics, and academic integrity.

The research questions include: How relevant is the protection of copyright, authorial ethics, and AI-generated plagiarism in the preparation and completion of academic assignments in university settings? What is the general attitude of the academic community regarding the compliance with authorial ethics and the problem of plagiarism in the academic environment when using AI tools? Are there any standards for the prevention of AI plagiarism?

To answer these questions, the research employs methods of analogy, typological studies, and pragmatic analysis. The study presents recommendations for strengthening the policies of educational institutions regarding copyright ethics protection and AI plagiarism prevention among the academic community and students.

Nowadays, the values and ideals of the academic community are undergoing certain changes. The idea of the university and its values are being transformed in terms of the active implementation and protection of ethical norms. Over the past two decades, ethical regulations have been developed and expanded in universities, professor and student unions, and research institutions: ethical codes have been created, and ethics committees have been established. International documents regarding the reorganization of higher education also include moral and ethical requirements for the academic community.

In this context, one of the most well-known documents is the Bologna Declaration, which states that a unified educational space should promote peaceful resolution of religious, national, and other conflicts, and contribute to the development of democratic values in society: "The aim of education and educational cooperation is the development and strengthening of sustainable, peaceful, and

democratic societies. This idea is universal and is confirmed as the main vector of development, especially in the context of Southeast Europe.” [1].

Another highly important international document that focuses on academic ethics is the Bucharest Communiqué, which addresses ethical values and principles in higher education across Europe.

In the preamble of the communiqué, the significant role of moral principles in the academic community is emphasized: “Universities cannot be considered value-neutral institutions. The values and ethical standards they uphold not only significantly influence the scientific, cultural, and political development of their academic staff, students, and employees but also contribute to shaping the moral face of society as a whole.” [2].

Over the last twenty years, modern universities and higher education institutions around the world have adopted ethical codes or other documents with ethical content. Universities in the United States, the United Kingdom, Europe, and Asia have implemented regulatory systems for ethics, including ethics committees and commissions, applied ethics research centers, complaints centers, and other ethical regulatory mechanisms. Ten to twenty years ago, ethical codes and regulations were rare in universities, but now this trend has become the norm. Most leading universities adopted ethics or conduct codes during the late 21st century.

All these facts indicate that the topic of academic ethics and its practical aspects is highly relevant.

The discussion of values and ideals within the academic community has not ceased since the Enlightenment. Philosophers of that era actively reflected on these issues. Their works frequently contained views on organizational culture, traditions, customs, and the ideals of the academic community (Diderot, Kant). In the 19th and 20th centuries, the idea of the university and its core values became the subject of study for authors such as Fichte, Nietzsche, Humboldt, Fischer, Schopenhauer, Weber, Ortega y Gasset, Heidegger, Derrida, Jaspers, John Dewey, and others.

Simultaneously, the modern stage of society’s development, including the academic community, is occurring alongside the formation of a technological worldview and rapid development. It is noteworthy that, with the diffusion of dynamic technologies and the progress of artificial intelligence (AI), the post-COVID era is promoting the intensive development of new AI tools and their application across various spheres of human life, including education and science.

The Council of Europe defines artificial intelligence as follows: “A combination of sciences, theories, and technologies aimed at replicating human cognitive abilities in machines. Given the current state of development, artificial intelligence means delegating complex intellectual tasks, traditionally performed by humans, to machines.” [3].

Artificial intelligence has become a significant part of the surrounding reality. The rapid increase in research and the high level of interest from the scientific community emphasize the need to develop a general methodology for studying AI as an independent interdisciplinary scientific field. This necessity is driven by the need for a systematic framework to address research problems by utilizing the best and most accessible methods in accordance with the goals and objectives of the research. This

methodology distinguishes science from the so-called “common sense” of everyday ideas. The construction of theoretical models is the main strength of science, allowing us to consider the heuristic validation of theory as a criterion for truth in understanding the adequacy of reality descriptions.

Scientists view artificial intelligence as a key technology that can be applied across all sectors of society. AI has the potential to improve the quality of life for many people and assist in solving global challenges such as climate change or health crises.

Artificial intelligence (AI) is a computer algorithm that performs intellectual tasks typically associated with human beings. Its systems are designed to perceive and interpret data, make complex decisions, and render unbiased judgments. AI algorithms can learn from experience and from the databases they generate. These systems aim to replicate or simulate human cognitive abilities, allowing them to solve problems and interact with the world in ways similar to human intelligence.

Today, vast sums of money are being invested worldwide in the development of AI systems. This demonstrates the significant economic potential of AI. However, as AI applications continue to expand, concerns arise about issues such as human values—fairness, freedom, data protection, security, and accountability. No other field of progress and development in modern times has so clearly and comprehensively raised the question of how humanity wishes to view its technical capabilities in the context of society. Undoubtedly, this technology has profoundly changed our daily lives and will continue to do so.

At the same time, it is clear that discussions about AI cannot bypass ethical considerations. To maintain public trust while leveraging AI’s capabilities, it is crucial to account for well-defined ethical standards when designing AI algorithms. It is important to establish a clear methodology that lays the foundation for the development of ethical codes and best practices. [4]

One particularly noteworthy issue is the use of personal data. Organizations must ensure privacy, transparency, and security policies in AI-driven programs and guarantee that data is collected and used responsibly.

A fascinating study was conducted by Iad Rahwan, director of the Max Planck Institute for Human Development in Berlin, in collaboration with the Media Lab at the Massachusetts Institute of Technology in Boston. The study aimed to create the concept of the so-called “moral machine.” This project is considered the largest study on the ethics of machines to date. The interactive survey explored the ethical reasons behind the decisions people make in different regions of the world and whether these reasons could be used to shape AI behavior guidelines. For example, how should an autonomous car act if a serious accident is unavoidable? AI must decide which direction to steer the car and who will survive as a result. The study found that all respondents wanted to save as many lives as possible, prioritizing children and law-abiding individuals. However, deeper analysis revealed that there are no globally applicable standard values. For instance, participants from France and South America preferred to save women and children over men, the Japanese prioritized the elderly, while most Germans preferred not to interfere, believing that “fate” should decide who lives and who dies. [5]

AI-based services are revolutionizing many sectors, and academia is no exception. However, like any innovative technology, ethical

considerations must be taken into account. Why is this discussion critically important? Because our approach to education shapes future generations.

AI technologies are evolving rapidly, gaining popularity, and have already been integrated into the academic processes of universities worldwide, including in Georgia. The high quality of work produced by AI tools (such as Chat GPT) is gaining popularity and spreading quickly among students.

With the swift adoption of AI in the education sector, AI-based essay-writing services are becoming increasingly accessible.

What are AI essay-writing services?

At their core, AI essay services use artificial intelligence to create, improve, or analyze essays. These services can offer several functions, including:

- Content Generation – Some advanced AI tools can generate entire essays based on given prompts or topics.
- Grammar, Vocabulary, Style Analysis, and Editing – AI-powered services can detect and correct grammatical errors, punctuation mistakes, and awkward phrasing in essays, often much faster and more accurately than traditional spell checkers. Some AI tools can also evaluate the style and tone of essays, providing feedback on whether the content is formal, informal, positive, negative, or neutral. These services can also improve vocabulary, sentence structure, and coherence.
- Plagiarism Detection – By comparing essay content with vast databases of existing material, these services can identify potential instances of plagiarism.
- Research Assistance– Some AI tools can help students gather relevant information or data related to their essay topics, improving the research process.

In essence, the advantages of AI essay-writing services are clear in today's fast-paced academic environment. Students juggle multiple assignments, extracurricular activities, and personal obligations. AI acts as a powerful ally, simplifying tasks and reducing the time spent on complex processes. By performing tasks like research, grammar checking, and basic content recommendations, AI tools allow students to manage their time more effectively, focusing on deeper self-development and creativity.

One of the key benefits of integrating AI into the academic field is the improvement of the learning experience. By identifying specific gaps in students' work, AI-based tools provide a clear roadmap for improvement. Students can focus on areas that truly need attention, ensuring the efficient allocation and management of their efforts.

The traditional academic feedback cycle, which often involves long waiting times and generic comments, experiences revolutionary progress with AI services. Students no longer have to wait weeks to find out where they went wrong. Instant feedback makes learning a dynamic and rapid process. This immediacy not only increases student engagement but also encourages faster review and understanding of material.

However, these positive processes are accompanied by ethical dilemmas surrounding AI in the academic space.

As AI capabilities grow, the ethical consequences of its use become even more significant. Naturally, with great power comes great responsibility.

One of the key questions is: What constitutes AI plagiarism? Can the unauthorized borrowing or use of generative AI-generated materials be considered plagiarism?

One of the most pressing challenges is the authenticity of AI-generated essays. If a student submits an essay initially created by AI tools, can we say that this is the student's original work? The blurred boundaries between human effort and machine production challenge our traditional understanding of authorship and originality. The question arises: Are we unintentionally promoting a culture where the processes of thinking, analysis, and creation are delegated to machines?

Moreover, the age of artificial intelligence represents a nuanced form of the age-old problem of plagiarism. Even if AI tools can generate unique content, there remains a shadow of doubt about its originality. This isn't just about pulling content from existing sources; we're talking about the genesis of the idea itself. And even if it's not technically plagiarism, does it still uphold the spirit of academic integrity?

Although AI has demonstrated remarkable abilities in solving various problems, its reliability remains a topic of debate. Machines operate based on algorithms and data, which may not always reflect the nuances and complexities of human thinking. Relying solely on AI-generated outcomes could lead to misconceptions and inaccuracies.

Today, data is a valuable commodity, and the collection of data has become a luxury. This raises numerous issues related to data privacy. As students increasingly turn to online AI tools for academic assistance, they often share personal information, essays, and research. But at what cost? There are growing concerns about how this data is stored, who has access to it, and the potential for its misuse. Are students inadvertently compromising their privacy in exchange for the convenience offered by AI-based services?

In the academic environment, learning is not just about acquiring information but about the originality of thought and the ability to innovate. It cannot be denied that AI can generate a large volume of content, often mimicking human writing styles. However, despite this, it cannot innovate in the way humans can. The human mind draws on experience, emotions, culture, and many other factors that AI, at least for now, does not possess. The nuances of human creativity, intuition, and inherent unpredictability are difficult for AI to replicate—though perhaps not impossible in the long run.

The primary goal of education is not merely to accumulate knowledge but to foster holistic personal and intellectual development. Today, there is a risk that students may become passive recipients rather than active participants. By relying too much on AI, they may miss the challenges, mistakes, and experiences that play a significant role in growth. By avoiding struggles, are we possibly losing the most important opportunities for intellectual and personal development?

Furthermore, the cornerstone of education is the development of critical thinking and analytical skills. However, excessive reliance on artificial intelligence creates the risk that students may underdevelop this critical aspect of their education. When a machine is

tasked with generating content, structuring arguments, or even conducting research, students might bypass the processes that sharpen their cognitive abilities. In the long run, will this cause more harm than good? Will it deprive students of the ability to think deeply and critically?

The emergence of technology is also changing educational relationships. The role of the lecturer, as an educator, is undergoing transformation. Instead of being the primary source of information, lecturers may shift into the role of mentors. Their main function could evolve from direct instruction to guidance, facilitation, and creating an environment where students critically engage with AI-generated content.

Regarding feedback, it's not just about pointing out mistakes; it's about fostering growth with human involvement. While AI-generated feedback can be precise and immediate, it often lacks the nuance and empathy that human feedback provides. This potential lack of personal connection could affect the depth and quality of a student's personal and academic development.

What solutions might exist for this situation?

The rapid integration of artificial intelligence into the educational space presents numerous challenges, but it's important to remember that every challenge is a disguised opportunity. The adoption of AI with a forward-thinking and responsible approach creates the foundation for it to become a truly effective tool, rather than a problem.

At this stage, one of the most immediate steps educational institutions can take is to establish clear policies and guidelines regarding the use of AI. It is essential to set boundaries on how and when AI tools should be used. Universities should ensure that technology is employed as an auxiliary tool for lecturers and academic staff, rather than as a replacement. Furthermore, universities must uphold the principles of academic ethics and academic freedom, ensuring that the learning and teaching process is not compromised.

In addition, by investing in comprehensive training programs for both professors and students, higher education institutions can reduce the likelihood of AI misuse or misunderstanding. Lecturers should undergo training on how to better integrate AI tools into their teaching practices, while students should receive information on ethical considerations and best practices for using AI in the learning process. By properly informing the key players in the academic space, we can find the right balance between harnessing the enormous potential of AI and preserving the invaluable human resources in higher education.

The intersection of artificial intelligence and academia is filled with both valuable nuances and shortcomings. While the appeal of AI essay writing is undeniable, it is crucial to navigate this terrain with a moral compass. The future of education depends not only on technology but on how we use it.

The need for the best AI universities in the world is more relevant than ever. As AI technologies continue to evolve and become more sophisticated, the demand for professionals who can understand, develop, and apply these technologies across various sectors grows. These professionals need a solid foundation in AI principles, as well as the ability to stay informed about the latest developments in the field. The best AI universities offer rigorous curricula, cutting-edge research opportunities, and faculty

comprised of leading experts in the field. They also provide collaborative and innovative learning environments where students can work on real-world projects and gain valuable experience.

Moreover, the best AI universities are often closely linked to industry, offering students internships, networking opportunities, and career prospects. They also have strong alumni networks, which can be invaluable for career advancement. Therefore, choosing the best university for AI can have a significant impact on a student's education and career trajectory.

Top 10 universities for artificial intelligence worldwide:

1. Oxford University
2. Massachusetts Institute of Technology (MIT)
3. National University of Singapore
4. Carnegie Mellon University
5. University of Chicago
6. Stanford University
7. Harvard University
8. University College London
9. University of Cambridge
10. University of California, Berkeley

How do universities around the world operate in the field of artificial intelligence?

The world's leading universities are actively engaged in the field of AI through various initiatives, including education, research, partnerships, and ethical considerations. Ethics is a major focus in AI research and development at universities. Brown University and Emory University are among those emphasizing the importance of ethics in AI, initiating educational programs and interdisciplinary discussions on the topic. Carnegie Mellon University hosts conferences on ethics and artificial intelligence, reflecting its commitment to addressing ethical and social issues in this field. Oxford University has established an Institute for Ethics in AI, bringing together experts to address the ethical challenges posed by AI.

Universities also contribute to the field of artificial intelligence by hosting scientific publications and academic conferences. Rankings based on publications and authorship contributions show that institutions such as Carnegie Mellon University, Peking University, and Tsinghua University are highly active in AI research.

Importantly, at the level of individual countries and major tech companies, special bodies are already being established to promote ethical standards in technology. For example, in Europe, there are ethics commissions in the field of artificial intelligence. The monitoring of ethical standards in specific companies is carried out by individual specialists. In 2021, the first ethical code for AI was developed by leading European companies and universities. Is this approach considered in the university space of Georgia?

The region's first AI university in Georgia, based at the Business and Technology University, has begun operations. This educational space integrates artificial intelligence into education and various sectors of business.

Increasingly, the university space in Georgia is witnessing a rise in scientific conferences addressing AI-related topics. These include conferences such as "Artificial Intelligence and Law," "Artificial Intelligence and Labor Relations," "Artificial Intelligence and Media Literacy," "Data Science and Artificial Intelligence," and others. Many universities offer students and staff training programs on the use and implementation of artificial intelligence.

Notably, several Georgian universities, including Ivane Javakhishvili Tbilisi State University, have activated the "Turnitin" anti-plagiarism platform. This was introduced to promote academic integrity and prevent plagiarism in Georgian universities through the Erasmus+ institutional development project: "Academic Integrity for Quality Learning in Georgian Higher Education Institutions (INTEGRITY)."

However, the relationship between artificial intelligence and ethical standards remains a challenge for Georgia's university space, requiring more informational and educational activities.

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