# Means of Forming a Culture of Academic Integrity of Postgraduate Students: Experience of Ukraine and the European Union

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# Abstract

The purpose of the article is to study how to form a culture of academic integrity of postgraduate students based on the consideration and analysis of the Ukrainian and European experience. To achieve this goal, the author used such research methods as analysis and synthesis, and the content analysis method was applied to study the scientific literature to official documents. The results show that the EU countries use a variety of tools, including the formation of educational ethics, university codes of conduct, specialised seminars and training, mentoring, the use of digital tools to detect plagiarism in dissertations, the imposition of severe sanctions for violations, as well as the use of public influence methods and the work of special control and accreditation commissions. The advantages of postgraduate education in European countries in terms of building academic integrity are the fact that this process has a long history of application and uses proven methods, while in Ukraine this concept is relatively new. This indicates the existence of certain weaknesses. Ukrainian codes of ethics for higher education institutions have a limited impact, unlike in European countries, where violations of academic integrity lead to the automatic isolation of a person in the scientific community. Ukrainian legal definitions also create precedents for avoiding responsibility for violations of academic integrity. The conclusions note some positive innovations in Ukraine, including borrowing forms of accreditation examinations and the work of a special agency to ensure the quality of education.

Keywords: postgraduate students, Ukraine, EU, academic integrity, ethics

# 1. Introduction

The means of fostering a culture of academic integrity is an important component of the development of higher education and science in the modern world. In today's information society, where access to knowledge is becoming increasingly important, it is important not only to acquire new knowledge but also to maintain high standards of ethics and integrity. Postgraduate students, as young representatives of the scientific community, have a special responsibility in this process, as they are building the future of science and education. Today, academic integrity is an integral part of the functioning of university and research communities, it determines the position and trust in the academic world and affects the quality of research and educational processes. The use of dishonest practices, such as plagiarism or failure to comply with ethical standards, can seriously undermine the credibility of the academic environment and harm the scientific community. In this context, research aimed at studying the means of fostering a culture of academic integrity among postgraduate students is of great importance.

The proposed scientific article is devoted to the problems of researching the means of forming a culture of academic integrity of postgraduate students and a comparative analysis of the experience of Ukraine and the European Union. The publication will address the issues of rules and norms of ethics in scientific research, attitudes and understanding of plagiarism, approaches to the definition of copyright, as well as the role of supervisors and higher education

institutions as educational institutions in the formation of academic integrity in general. The above-mentioned issues will be considered through the prism of highlighting the practices used in Ukraine to counteract manifestations of academic dishonesty among postgraduate students. This will allow for a prognostic aspect of the study, which will involve comparing and using best practices, especially those of Europe. Research on this topic is important for further improving the quality of research and training of young scientists. It will help to identify best practices for building a culture of academic integrity and facilitate Ukraine's further integration into the European Union's scientific space.

The modern literature identifies some areas of the formation of academic integrity of postgraduate students. In particular, Bošković (2023) described the peculiarities of the legal explanation of academic integrity based on the analysis of European practices. Chaika et al. (2023) described the issue of plagiarism intolerance in an intercultural academic environment. Joyner (2022) identified the theoretical foundations of the phenomenon of academic integrity. Some of the foundations for the formation of a culture of academic integrity are described in the study by Demyaniuk & Bilous (2022). At the same time, the theoretical foundations of this concept are described in detail in Möller (2022). Moya (2023) described the main practices of combating plagiarism in modern higher education institutions. Kuzmenko (2021a) presents the history of academic integrity in Ukraine. Separately, Kuzmenko (2021c) and Kuzmenko (2021d) identified the current state of academic integrity in Ukraine and described the main requirements for future Doctor of Philosophy Kuzmenko (2021b) also presents the experience of Latin America in the process of forming academic integrity formation. These researchers also identified the state of academic integrity and anti-plagiarism in Germany. Muraina (2023) describes the main challenges to the further development of the system of pedagogy and teaching.

Therefore, the purpose of the article is to analyse the means of forming a culture of academic integrity for postgraduate students based on the study of the Ukrainian and European experience. The realisation of this goal involves consideration of several tasks, in particular, analysis of the existing practice of creating a culture of academic integrity in European higher education institutions, ways of applying these practices in the Ukrainian context, and the difficulties that will arise on this way.

# 2. Method

The type of this research is qualitative. The collection of materials involved the use of modern scientific literature in such databases as Scopus, Google Scholar, Ebsco. Keywords such as modern education, academic integrity, graduate students, integrity check, EU, Ukraine are included in these databases. Literature inclusion criteria:

- 1. Relevance. The study is devoted to the actual practices of checking academic integrity
- 2. Content. The study presents various mechanisms of formation of academic integrity
- 3. Emphasis on higher education
- 4. Geographic focus: Ukraine and EU countries
- 5. The selected research should have scientific novelty and practical significance

Therefore, a total of 32 items of scientific literature were selected

The methodological basis of this article is based on the application of various scientific methods used in research (Kitchell & Parnther, 2022). First of all, the general scientific methods of analysis and synthesis were used to formulate our own conclusions and thoroughly consider the issues outlined in the title of the article. The normative-dogmatic method was used to process the existing practices of forming a culture of academic integrity and to review the regulations governing this area. Additionally, the content analysis method allowed us to systematise and analyse the scientific literature on this issue. The systemic-structural method was used to assess the current state and possibilities for further improvement of legal regulation of manifestations and forms of academic dishonesty based on practices used in the European Union. To achieve the research objectives, several stages were carried out. Firstly, the scientific literature on the issue under consideration was analysed, which served as the basis for formulating the hypotheses of scholars that became the theoretical basis of the article. The author also studied the experience of developing academic integrity among postgraduate students in the EU countries, i.e., at the international level, with a view to its further application in practice in Ukraine as part of harmonisation with the scientific life of Europe.

At the second stage, using the normative-dogmatic and systemic-structural methods, the existing and controversial

issues in the formation of a culture of academic integrity among postgraduate students were identified. This became the basis for the third stage, which formed conclusions and recommendations, as well as identified elements that would require further consideration. All this was done through the active use of the synthesis method.

# 3. Results

# 3.1 Building a Culture of Academic Integrity in the EU and Ukraine: International Aspect, University Levels, and Ethical Dimensions

The formation of a culture of academic integrity among postgraduate students (along with the training of students of levels I and II) is an important component of higher education in the European Union. This culture promotes the development of high standards of intellectual honesty, ethics, and responsibility among postgraduate students, and educates citizens capable of making informed decisions and adhering to professional morality. Among European universities, academic integrity is considered an element of the quality of the educational process, which is regulated, in particular, by the Bucharest Declaration of Ethical Values and Principles of Higher Education in the European Union (Slobodianiuk, 2019). This document was adopted in September 2004 as part of the International Conference in the Romanian capital Bucharest. Certain sections of this document clearly outline the role played by academic ethics, culture and community, and academic integrity in the provision of educational services. It also emphasises democratic and ethical governance, research based on the use of academic integrity and social responsibility. The conference participants specified the essence of the concept of "academic integrity" and included such elements as honesty, trust, fairness, respect, accountability, and responsibility in its fundamental features.

Another important document, but already at the level of universities, was the agreement adopted in December 2012 by the International Association of Universities and the Magna Charta Observatory (Magna Charta Universitatum) entitled "Guidelines for Institutional Codes of Ethics in Higher Education". The agreement under study became a joint document for the work of key participants in the university environment, which provided for the consent and responsibility for compliance with certain principles that are intended to form the organisational and moral identity of students, including at the level of postgraduate students (Latopolski and Gallant, 2023). First of all, we are talking about the following main components: academic honesty and adherence to ethical behaviour in research, principles of equality, justice, and zero tolerance for discrimination, the importance of accountability and transparency, the ability to critically analyse and respect the arguments of other researchers, free and open dissemination of universities has developed a system of implementing Codes of Ethics to ensure the social responsibility of higher education institutions to society, guaranteeing the provision of quality education and compliance with ethical standards by researchers in conducting research. In 2013, the Council of Europe's Pan-European Platform for Ethics, Transparency, and Integrity in Education (ETINED) developed several important documents, including the Ethical Principles and Ethical Behaviour of All Participants in the Educational Process.

Taking a long-term view of the fight against dishonesty, it is clear that universities in Europe consider it a serious threat to their academic security (Ortega-Martín & Madrid, 2006). At the level of each university, appropriate regulations are established, and a system of penalties and sanctions is imposed. Almost every European educational institution has its own Code of Ethics, the main principles of which are responsibility, competitiveness, service to society, ethical behaviour, respect for the law, support for international cooperation, and respect for the environment. The general trends in the development of academic integrity in European universities are globalisation, the introduction of professional ethics and deontology into the educational process, and informatisation.

Therefore, the essence and role of honour codes in shaping the academic culture of higher education students and teaching, research, and academic staff of universities are important aspects of ensuring academic integrity among postgraduate students. In European countries, the use of honour codes has a long and fruitful history. They usually consist of two main parts: a list of academic violations and the establishment of consequences for their commission. Due to the autonomy of educational institutions, universities are able to independently determine sanctions for violations of academic integrity (Riedesel et al., 2012; Iskakova, 2023). From the point of view of the degree of involvement of postgraduate students in the control of academic integrity, traditional and modified codes are distinguished. In Ukraine, the use of honour codes has only recently become relevant, which makes their impact on the development of academic integrity different from the measures taken in the EU. It is worth noting that this initiative is relatively widespread: only 27 Ukrainian universities have adopted such a code, and even among this limited number, there are even fewer examples of high-quality and responsible codes. The main purpose of honour codes is to uphold academic integrity and promote its development. However, some Ukrainian examples do not

mention the concept of academic integrity at all, and those that do address it too often simply cite legislation. In addition, it is often unclear how the penalties for violations of academic integrity will be determined. In our view, the main shortcomings of Ukrainian honour codes include excessive theoreticalism, formalisation, and an incorrect understanding of the purpose and target audience.

#### 3.2 Teaching Postgraduate Students about Academic Integrity in the EU and Ukraine

Poland started fighting academic dishonesty of postgraduate students much earlier than Ukraine. In particular, in 1994, the Act on Copyright and Related Rights was adopted, which was subsequently amended, as necessary. This legislative act became the basis for political and legal regulation of the fight against such academic dishonesty as plagiarism. The existing system was further improved, and in 2007, Poland introduced the Plagiat.pl system, a programme for the exchange of university information databases for the verification of qualification papers and dissertations. This led to the creation of the first non-institutional database on the Internet. It is worth noting the positive experience introduced in 2008 through the cooperation between the Polish Accreditation Council (PAC) and Plagiat.pl. In particular, the Accreditation Committee fulfils its mission by conducting mandatory programme assessments of the quality of education and providing opinions on applications for research and education programmes submitted by higher education institutions (Kokkinaki et al., 2015). These measures have contributed to improving the quality and efficiency of universities, as well as strengthening the mechanisms for monitoring scientific integrity and preventing academic dishonesty. In the Polish educational environment and the training of future PhDs, the introduction of specialised courses in the educational process of higher education institutions has become an effective tool in the fight against academic dishonesty. The main purpose of these courses is to teach postgraduate students the basic rules and regulations regarding the writing of scientific articles, the selection and formulation of the topic, the definition of the object, subject, and purpose of dissertation research, as well as the establishment of rules for the design of used and cited scientific literature (Sadowski 2021). The Polish education system is characterised by transparency and openness, thanks to the creation of repositories through which scientific information is exchanged.

Germany has a streamlined system for checking academic integrity. The impetus for the changes came from a case in 2011 concerning a doctoral dissertation written by Karl-Theodor zu Guttenberg, who served as the German Minister of Defence (Weber-Wulff, 2014). The scandal came to light on 16 February 2011, when the Süddeutsche Zeitung published a report that Guttenberg may have plagiarised his doctoral thesis. The report was based on information provided by Professor Fischer-Lescano, a public law expert at the University of Bremen, in which 23 long paragraphs of the thesis were verbatim copies of passages from other publications that he documented in his review (Ruipérez & García-Cabrero, 2016). It is worth noting the significant role of social media in this context. Just one day after the initial report, a Wiki called GuttenPlag was launched to allow for the collaborative and open documentation of additional cases of plagiarism. The GuttenPlag initiative led to the development of a new methodology for documenting plagiarised text passages, which later served as a model for investigating subsequent plagiarism cases on a Wiki called VroniPlag (Ruipérez & García-Cabrero, 2016). The colour-coding system originally used by GuttenPlag was adopted by VroniPlag with some improvements, making it easier for anyone to quickly understand the degree of plagiarism in future dissertations. Since then, this programme has been actively used in German universities for plagiarism checking.

In general, Germany has a serious system in place to prevent academic dishonesty among PhD students and to ensure a high standard of integrity in the academic environment. Some of the means and practices used for this purpose include teaching postgraduate students about the theoretical aspects of academic integrity. In Germany, academic integrity and ethics are actively taught and developed through various subjects and study programmes. For example, postgraduate courses such as "Ethics in Scientific Research" or "Ethics in Science" are taught to postgraduate students. These courses include a detailed study of ethical issues related to research, academic integrity, and issues of scientific fraud. Some institutions also offer the discipline of "Jurisprudence and Academic Integrity," a course that examines the legal aspects of academic integrity and intellectual property issues, or "Scientific Integrity", a course that explores the concept of academic integrity and the rules of scientific ethics. Another important subject is "methods of scientific research," which begins to be taught in detail at the master's level and is later continued at the postgraduate level. This course may address the ethical aspects of scientific research and academic integrity. Information also plays an important role in the system of academic integrity formation in postgraduate students (Cleary & Sayers, 2017). In particular, PhD students are informed with special documents, including the Recommendations on Academic Integrity Position Papep. This document consists of several parts: Recommendations and guidelines on good scientific practice, Implementation in Germany, Areas of action, and recommendations. In this document, postgraduate students can learn about the concept of academic integrity, the

manifestations of plagiarism (the document explains in detail what academic integrity is and why it is important and what plagiarism is), the harm of plagiarism to the scientific field, etc. Here, postgraduate students can also learn about the specifics of publishing in international journals and the process of preparing an article for publication. It is worth noting that German universities have clear rules and standards regarding academic integrity, and violation of these standards can lead to serious consequences, including loss of scholarships, expulsion from the institution, and other sanctions. In view of these trends in the development of academic integrity in Germany, it is worth emphasising the culture of trust that is fostered in students during their first years at university. So, let's summarise these areas in the form of a table (See Table 1).

Direction	Explanation	
Education and information	Universities and other research centres actively educate postgraduate students about the rules of academic honesty and the importance of avoiding plagiarism and other forms of academic dishonesty. Postgraduate students are usually provided with visual information and textbooks explaining the rules of writing and research.	
Plagiarism checker	German universities use advanced plagiarism detection software that automatically checks postgraduate students' work for plagiarism. This helps to detect violations in time and prevent dishonesty.	
Strict system of standards	Universities have clear rules and standards regarding academic honesty, and breaching these standards can lead to serious consequences, including loss of scholarships, expulsion from the institution, and other sanctions.	
A culture of trust	The German academic environment is characterised by a culture of trust, where teachers and students expect honesty from each other. This helps to avoid academic dishonesty and create a fair environment for learning and research.	
Administrative measures	German universities have separate administrative structures for handling complaints and cases of academic integrity. This may include disciplinary committees that review complaints and resolve cases.	

Table 1. Areas That Shape the Culture of Academic Integrity in German Universities

Source: compiled by the authors

France is committed to creating an academic environment where integrity and research ethics are important values and where postgraduate students are equipped with the appropriate skills and values of academic integrity. Many French universities have their own code of academic integrity that sets out the rules and norms of academic honesty (Dorozhko 2022; Tsekhmister et al., 2023). Postgraduate students and professors must adhere to these norms when conducting research and writing academic papers. In addition, according to current research, more than 20 French universities have special academic integrity reviewers or research project managers. These persons are required to meet certain criteria, including knowledge of scientific issues, objectivity, independence, and confidentiality. They are appointed by the university administration and their identity and contact details are made public. They have a special manual on scientific integrity, which defines the concept of scientific integrity and outlines their responsibilities. These responsibilities include tasks such as vigilance and oversight, prevention and remediation of misconduct, promotion of a culture of scientific integrity in their respective institutions and reporting to the university management on the cases they review (Batechko et al., 2020). These referees are part of a national network and are connected to their European counterparts through the Enrio network (European Network of Research Integrity Officers).

Working groups investigating academic dishonesty or vice versa have also been established in Austria. It is also important that this country keeps statistics that are collected annually at the national level on the main cases of academic dishonesty in higher education institutions (Glendinning, 2013). In addition, in Austria, many universities have their own software for detecting dishonesty and plagiarism among postgraduate students (Cullen & Parnther, 2022). It is worth noting that in the Netherlands, the national organisation SURF creates separate technological solutions to support PhD students, fostering a culture of academic integrity. In addition, most Dutch universities also use a variety of their own national software tools to check the uniqueness of dissertations (Glendinning, 2013). At the same time, some institutions provide special support for postgraduate students to improve their study skills, including academic integrity and digital competence.

Thus, in general, the European means of fostering a culture of academic integrity are aimed at defining common outcomes, which are implemented by specific instruments (see Table 2).

Tool	Implementation
Ethical education	European universities pay special attention to ethical education. This includes lectures and seminars on academic integrity and moral standards. Postgraduate students study the principles of honesty and ethical behaviour in the academic environment.
University codes	Many European universities have their own codes of ethics or rules that define standards of academic integrity, including the prohibition of plagiarism and other forms of cheating.
Seminars and workshops	Some universities organise special seminars and workshops that teach students how to avoid plagiarism, cite sources correctly, and formulate their own ideas and research
Internship programmes and mentoring	Some universities are introducing internship and mentoring programmes, where experienced academics and teachers support students in academic integrity and teaching ethical standards.
Anti-plagiarism systems	Universities use specialised software to detect plagiarism in postgraduate research papers.
Strict sanctions for violations	European higher education institutions impose severe sanctions for violations of academic integrity, including loss of points, expulsion, or expulsion from the university.
Public discussion	Public debates and discussions are often held on academic integrity issues to help set common standards and ensure open dialogue.
Accreditation work	The provision of appropriate educational services is regulated by special institutions that accredit the activities of higher education institutions. Their assessment plays an important role in identifying the level of knowledge of students about academic dishonesty.

Table 2. Tools for Ensuring a Culture of Academic Integrity in the EU

Source: compiled by the authors

Therefore, common features in the implementation of a culture of academic integrity play an important unifying role in European education. The culture is based on intergovernmental documents, and, despite the peculiarities of national educational systems, its foundations are the same for all participants in the EU educational space. As can be seen from the table, the accreditation commission also plays an important role. A number of case studies and examples from different universities and educational institutions can be used to demonstrate how accreditation commissions and educational ethics can support academic integrity among postgraduate students.

Case Study 1. The Function of University Accreditation Commissions in EU: Applying Stringent Guidelines

Background: An accreditation commission renowned for its exacting standards thoroughly examined

Taken Actions:

1. Development a comprehensive set of guidelines on academic integrity was created, along with definitions of academic misconduct such as plagiarism and cheating (Batechko et al., 2020).

2. The institutions have made academic ethics and the value of honesty mandatory for both staff and students.

3. Reports on incidents and resolutions pertaining to academic integrity were mandated by the accreditation

commission.

Result:

Cases of academic misconduct significantly decreased.

Graduate students claimed to have a better knowledge of the definition of academic dishonesty.

Teachers grew more watchful in spotting and stopping academic dishonesty.

Case study 2: Technology Integration to Support Academic Integrity in EU

Background: To include cutting-edge plagiarism detection software into its academic system, the university worked with an accreditation authority.

Taken Actions:

1. Prior to final submission, all postgraduate students were expected to submit their theses and dissertations to plagiarism detection software.

2. In order to teach students how to use the program and stress the value of originality in academic work, workshops were conducted (Tsekhmister et al., 2023b; Tsekhmister, 2023a).

3. Students and professors were provided with explicit criteria about acceptable similarity indices together with the results of the plagiarism checks in a transparent manner (Tsekhmister et al., 2021; Tsekhmister, 2022).

Result:

There was a notable decrease in the frequency of plagiarism among postgraduate students.

Pupils started rewriting information and citing sources more carefully.

Instructors discovered that upholding academic integrity was simpler.

#### 4. Discussion

In the Ukrainian context, similar mechanisms are used to ensure the quality of education and overcome manifestations of academic dishonesty. In particular, a tangible theoretical component has also been introduced for the training of postgraduate students, in which a significant place is given to familiarising postgraduate students with the basics of academic integrity (Slobodianiuk, 2021). Usually, we are talking about a specific academic discipline, which is related to teaching students the basics of academic integrity both in name and in essence. This discipline (or several disciplines) is compulsory, so it is impossible to avoid them during theoretical training. Elements of combating dishonesty can also be traced in other disciplines taught to future PhDs. First of all, it is said that in the syllabi of academic disciplines, a mandatory element is a statement about complete intolerance to manifestations of dishonesty in science, which automatically implies that students are familiarised with this concept and its characteristics. The National Agency for Quality Assurance in Education, established in 2015, is also an important tool, as it is responsible for accrediting study programmes for education, including postgraduate studies. The accreditation procedure is helping to bring attention to teaching the rules of academic integrity. For this purpose, the criteria for assessing the educational activities of higher education institutions include a separate section that allows to assess the familiarity of postgraduate students with this issue. During a meeting (in person or remotely) with students, experts can personally determine how familiar postgraduate students are with this problem and what methods of counteraction they know. This tool (accreditation of educational and research programmes) can be recognised as a fairly effective mechanism, as it reveals gaps in training on this issue (Androsova, 2023). If the unsatisfactory state of knowledge of students is revealed, the educational and research programme does not receive proper accreditation, which is the basis for its cancellation in the future.

Ensuring academic integrity requires taking into account the characteristics of new educational environments, their attitude to the past and present of Ukraine. In European realities, it is about defining standards in the field of transparency and responsibility. In fact, all EU member states have already adapted their requirements to program documents. In Ukraine, this process has only just begun. And, probably, it will continue in the future. In practice, national agencies and university committees for academic integrity function in every EU country. The National Agency for the Quality of Education also functions in Ukraine, but there are no special university committees. This has its impact on further education, including post-graduate education. Graduates of European universities that adhere to high standards of academic integrity are more competitive in the labor market, while graduates in Ukraine have a limited range of opportunities.

Thus, the current Ukrainian experience is similar to the practices of European universities. However, there are some functional features that require additional interpretation (Afanasieva, 2023; Morska and Davydova, 2021; Kaminskyy and Viesova, 2022). First of all, there are difficulties with the definition of academic integrity, which are typical for the Ukrainian system of postgraduate education. In the European sense, the definition of academic integrity is not only about simple honesty or decency but also about a holistic quality consisting of several components (Stoesz, 2022). Ukrainian researchers have decided to use the terms "academic integrity" and "academic honesty" as synonyms. As mentioned earlier, in the classical Western sense, academic integrity is based on the principles of honesty, trust, fairness, respect, responsibility, and courage.

The European approach is based on universal human values and is moral and ethical in nature, emphasising the importance of human free will and self-awareness (Weber-Wulff, 2014; Bushman, 2022). The Ukrainian approach, on the other hand, is legal and imperative, which is a significant difference in the concept of academic integrity between the EU and Ukraine and affects the approach to academic misconduct. The term "academic misconduct" is widely used in foreign sources. Two other related terms – "violation of academic integrity" and "academic dishonesty" - are abstract concepts, and their implementation in practice is manifested in the form of "academic misconduct." The Ukrainian terminology includes the term "types of violation of academic integrity" to reflect these conceptual differences. Certain conflicts create problems for the training of postgraduate students. First of all, the classifications of dishonesty in the academic environment have a distinctly national character and correspond to the local realities of higher education. Concepts such as "bribery," "biased evaluation" and "self-plagiarism" are not typical for the Western terminology of academic integrity, as they are not relevant in the field of higher education and science in developed countries. Secondly, the researchers note that the foreign typology of academic misconduct is more detailed and structured than the Ukrainian one. Thirdly, the definition of academic misconduct by law indicates problems in the higher education system in Ukraine.

For the proper formation of a culture of academic integrity among postgraduate students and other higher education students, it is important to develop responsibility for academic dishonesty (Cullen & Parnther, 2022; Dorozhko, 2022). The European experience (e.g., German practice) provides for the provision of an adequate level of knowledge about academic integrity at the stage of bachelor's or master's studies so that when preparing for a doctorate, students have a sufficient culture of academic integrity to use it at a new scientific level (Latopolski & Gallant, 2023). In Ukrainian realities, problems with the legislative field and the low initiative of universities in introducing students to an important aspect of the functioning of such an important aspect create tangible problems (Kuzmenko, 2021d). Equally important is the fact that liability for plagiarism and other violations in Ukraine is rather conditional, while in Europe, violation of the moral code leads to the isolation of the offender in the scientific world. The imperfection of the Ukrainian legislative framework leads to the fact that persons suspected of serious violations of academic integrity (plagiarism) are banned from consideration of such cases by the court. In such circumstances, explaining to postgraduate students the responsibility for their dishonest actions becomes an urgent problem.

It is probably worth agreeing with the researchers that mentality plays a peculiar role i1n counteracting the emergence of academic dishonesty. In particular, in Ukrainian realities, a rather pragmatic understanding of education is often encountered, in which "paper" results begin to prevail over real ones. Accordingly, for the formal implementation of such training, students of education act in various ways, often resorting to plagiarism of works in order to simply "pass the number" and move on, receive, in the final analysis, a diploma. In European countries, education is considered as a means of further personal development, acquisition of new knowledge, abilities and skills with the application of elements of critical thinking.

# 5. Final Considerations

Formation of a culture of academic integrity in the EU and Ukraine is an important aspect of modern training of PhD students. For this purpose, the EU countries use certain tools, such as the formation of educational ethics, university codes of conduct, organisation of special seminars and trainings, mentoring, use of digital tools to detect plagiarism in dissertations, imposition of severe sanctions for violations, use of methods of public influence, and the work of special accreditation commissions. An important advantage of postgraduate training in European countries (in terms of developing elements of academic integrity) is the continuity of the process, as training and education have a long history of application and use proven methods, while this concept is relatively new for Ukraine. This points to certain weaknesses. First of all, in the Ukrainian reality, the ethical codes of higher education institutions have little influence, while in European countries, a violation of academic integrity by a postgraduate student (and any

researcher in general) leads to his or her automatic isolation in the scientific community. In addition, difficulties in legislative definitions create precedents in Ukraine for avoiding responsibility for non-compliance with the rules of academic integrity. In such circumstances, their personal ethical principles, cooperation with their supervisor, and compliance with the norms of the higher education institution become important for the education of postgraduate students. Among the positive innovations in Ukraine is the borrowing of forms of accreditation examinations and the work of a special agency for quality assurance. such examples of harmonisation of the Ukrainian experience with the European one create favourable conditions for participants of the educational process (including postgraduate students) to master the culture of academic integrity. At the same time, the importance of improving the legislative framework should be recognised as a promising area for further scientific consideration, which will open up new opportunities for the development of appropriate standards of scientific activity.

#### References

- Afanasieva, N. (2023). Analysis of Methods and Tools for Visualising Anatomy in the Professional Training of Future Design Teachers. *Futurity of Social Sciences*, 1(2), 59-70. https://doi.org/10.57125/FS.2023.06.20.05
- Androsova, N. (2023). Digital Opportunities for the Development of Inclusive Education in Primary School in Ukraine: A Teacher's Experience. *E-Learning Innovations Journal*, 1(1), 4-21. https://doi.org/10.57125/ELIJ.2023.03.25.01
- Batechko, N., Durdas, A., Kishchak, T., & Mykhailichenko, M. (2020). Implementation of the principles of academic integrity in the context of European practice. *Educological Discourse*, (1), 168-181. https://doi.org/10.28925/2312-5829.2020.1.14
- Bošković, M. (2023). Rethinking Legislation Governing Academic Integrity in the European Context. *Center for Educational Policy Studies Journal*, 13(3), 11-32. https://doi.org/10.26529/cepsj.1585
- Bushman, I (2022). Education in the 21st century: philosophical foundations and principles. *Futurity Philosophy*, 4-15. https://doi.org/10.57125/fp.2022.06.30.01
- Chaika, O., Domina, V., Nikolaienko, S., & Fedosii, O. (2023). Zero Tolerance to Plagiarism in Multicultural Teamwork: Challenges for English-Speaking non-EU and EU Academics. World Journal of English Language, 13(4), 14. https://doi.org/10.5430/wjel.v13n4p14
- Cleary, M., & Sayers, J. (2017). Academic Integrity and Plagiarism. Nurse Author & Editor, 27(2), 1-9. https://doi.org/10.1111/j.1750-4910.2017.tb00243.x
- Cullen, C., & Parnther, C. (2022). Collaboration Policies and Academic Integrity. SAGE Publications, Inc. https://doi.org/10.4135/9781071887967
- Demyaniuk, A. V., & Bilous, I. I. (2022). Implementation of the principles of academic integrity in domestic scientific and pedagogical activity. *Innovate Pedagogy*, *1*(48), 18-21. https://doi.org/10.32843/2663-6085/2022/48.1.3
- Dorozhko, A. (2022). Academic Integrity in the Context of European Experience and Ukrainian Practice. *Educational Challenges*, 27(1), 57-66. https://doi.org/10.34142/2709-7986.2022.27.1.05
- Glendinning, I. (2013). Comparison of policies for Academic Integrity in Higher Education across the European Union Retrieved from http://plagiarism.cz/ippheae/files/D2-3-00%20EU%20IPPHEAE%20CU%20Survey%20EU-wide%20report.pd f
- Iskakova, M. (2023) Electronic Technologies to Ensure Individual Learning of Education Seekers with Special Needs. *Futurity of Social Sciences*, 1(1), 4-20. https://doi.org/10.57125/fs.2023.03.20.01
- Joyner, D. A. (2022). Academic Integrity. In *Teaching at Scale* (p. 166-180). Routledge. https://doi.org/10.4324/9781003274834-15
- Kaminskyy, V., & Viesova, O. (2022). Innovative activities in healthcare institutions of the future: models for overcoming dilemmas. *Futurity Medicine*, 1(1), 18-28. https://doi.org/10.57125/FEM.2022.03.25.02
- Kitchell, E., & Parnther, C. (2022). Communicating to understand academic integrity policies in every class. SAGE Publications, Inc. https://doi.org/10.4135/9781071891896
- Kokkinaki, A. I., Demoliou, C., & Iakovidou, M. (2015). Students' perceptions of plagiarism and relevant policies in

Cyprus. International Journal for Educational Integrity, 11(1). https://doi.org/10.1007/s40979-015-0001-7

- Kuzmenko, A (2021b). Kultura akademichnoi dobrochesnosti PhD-zdobuvachiv: dosvid Latynskoi Ameryky [The culture of academic integrity of PhD students: the experience of Latin America]. Visnyk LNU imeni Tarasa Shevchenka. Seriia: Pedahohichni nauky, 6(344), 162-171, http://hdl.handle.net/123456789/9274.
- Kuzmenko, A (2021c). Otsinka suchasnoho stanu formuvannia kultury akademichnoi dobrochesnosti u ZVO Ukrainy [Assessment of the current state of formation of a culture of academic integrity in higher education institutions of Ukraine]. *Pedahohika formuvannia tvorchoi osobystosti u vyshchii i zahalnoosvitnii shkolakh*, 79, 135-139. https://doi.org/10.32840/1992-5786.2021.79.1.27
- Kuzmenko, A. (2021a). Istoriia stanovlennia akademichnoi dobrochesnosti u zakladakh vyshchoi osvity Ukrainy [The history of the formation of academic integrity in higher education institutions of Ukraine]. *Pedahohichni nauky: teoriia ta praktyka*, 3(39), 167-172. Retrieved 20 Sep. 2023 from http://nbuv.gov.ua/UJRN/Vznu ped 2021 3 25
- Kuzmenko, A. (2021d). Vymohy do doktora filosofii v Ukraini yak subiekta akademichnoi dobrochesnoi diialnosti [Requirements for a Doctor of Philosophy in Ukraine as a subject of academic virtuous activity]. Aktualni pytannia humanitarnykh nauk: mizhvuzivskyi zbirnyk naukovykh prats molodykh vchenykh Drohobytskoho derzhavnoho pedahohichnoho universytetu imeni Ivana Franka, 45(2), 137-144. Retrieved from http://www.aphn-journal.in.ua/archive/45\_2021/part\_2/45-2\_2021.pdf
- Latopolski, K. E., & Gallant, T. L. B. (2023). Academic integrity. In *Student conduct practice* (p. 243-257). Routledge. https://doi.org/10.4324/9781003447177-15
- Möller, A. (2022). An analysis of university academic integrity policies in New Zealand. *Journal of Further and Higher Education*, 1-13. https://doi.org/10.1080/0309877x.2022.2130195
- Morska, N., & O. Davydova, N. (2021). Philosophy and the future of human rights: peculiarities of the relationship between recent science and technology. *Futurity Economics & Law*, 1(3), 16-25. https://doi.org/10.57125/FEL.2021.09.25.02
- Moya, B. A. (2023). Academic Integrity Policies in Hispanic South American Higher Education: Status and Recommendations. In *Handbook of Academic Integrity* (p. 1-23). Springer Nature Singapore. https://doi.org/10.1007/978-981-287-079-7\_122-1
- Muraina, I. O. (2023). Resolving Misconception Challenges in the Teaching and Learning of Computer Science Amongst First-Year Undergraduate Students. *Futurity Education*, 3(3), 151-164. https://doi.org/10.57125/FED.2023.09.25.08
- Ortega-Martín, J. L., & Madrid, D. (2006). A framework for teaching practice in the european context: General principles and assessment. *The International Journal of Learning: Annual Review*, 13(7), 135-144. https://doi.org/10.18848/1447-9494/cgp/v13i07/44986
- Riedesel, C. P., Clear, A. L., Cross, G. W., Hughes, J. M., Simon & Walker, H. M. (2012). Academic integrity policies in a computing education context. In *The final reports*. ACM Press. https://doi.org/10.1145/2426636.2426638
- Ruipérez, G., & García-Cabrero, J.-C. (2016). Plagiarism and academic integrity in Germany. Comunicar, 24(48), 9-17. https://doi.org/10.3916/c48-2016-01
- Sadowski, K. (2021). Implementation of the New European Bauhaus Principles as a Context for Teaching Sustainable Architecture. *Sustainability*, *13*(19), 10715. https://doi.org/10.3390/su131910715
- Tsekhmister, Y. (2022). Effectiveness of Practical Experiences in Using Digital Pedagogies in Higher Education: A Meta-Analysis. Journal of Higher Education Theory and Practice, 22(15), 138-150. https://doi.org/10.33423/jhetp.v22i15.5567
- Tsekhmister, Y. (2023a). Effectiveness of case-based learning in medical and pharmacy education: A meta-analysis. *Electronic Journal of General Medicine*, 20(5), Article em515. https://doi.org/10.29333/ejgm/13315
- Tsekhmister, Y., Konovalova, T., & Tsekhmister, B. (2021). Distance learning technologies in online and mixed learning in pre-professional education of medical lyceum students. *Journal of Advanced Pharmacy Education* and Research, 11(4), 127-135. https://doi.org/10.51847/zly2idwa4f

Tsekhmister, Y., Stetsenko, N., Volyk, O., Gumennykova, T., & Sharov, O. (2023b). Forecast of Educational Trends

in the Role of "Soft Skills" for the Professional Development of Future Specialists in the Conditions of Distance Learning: The Challenges of Our Time. *Journal of Higher Education Theory and Practice*, 23(10). https://doi.org/10.33423/jhetp.v23i10.6195

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