

POLICIES AND PROCEDURES FOR ENSURING RESEARCH INTEGRITY IN UKRAINIAN UNIVERSITIES

Iryna Drach

Associate Professor, DSc,

Institute of Higher Education of the National Academy of Educational Sciences of Ukraine,
e-mail: i.drach@ihed.org.ua, orcid.org/0000-0001-7501-4122, Ukraine

Abstract. The article explores the issue of formation of integrity research environment in universities. National legislation on implementation of academic integrity policies and procedures in Ukrainian universities is analyzed. To evaluate experience and practices of Ukrainian universities in assuring research integrity, the documents presented on websites of three leading Ukrainian universities according to the National Ranking «Top 200» (2019) are analyzed and compared with the documents used in the process of ensuring research integrity by UK universities as world leaders in higher education. Possible measures for overcoming the crisis of research integrity in Ukrainian universities are proposed.

Keywords: research governance, code of ethics, culture of research integrity.

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Introduction

The current paradigm of research governance involves transparency of management activity, broad involvement of community in monitoring the process and results of research, continuous improvement of standards for enhancing the quality of research, preventing fraud and abuse in research (Drach, 2018). Implementation of this paradigm is closely related to one of the key trends in modernization of Ukrainian higher education, outlined in recently adopted Law of Ukraine on Higher Education (2014), the Law of Ukraine “On Education” (2017), the Law of Ukraine “On scientific and scientific-technical activity” (2016) and other documents. The provisions of above legislation these regulations emphasize the need to endorse academic integrity in educational process and research, which involves development and application of relevant policies and procedures.

Materials and methods

The Law of Ukraine "On Education" defines the term "academic integrity" and describes types of academic liability of pedagogical, academic and research workers of educational institutions for its violation. The Law of Ukraine "On Higher Education" obliges higher education institutions to have an internal system of quality assurance of educational activity and higher education, which provides for the observance of academic integrity by workers of higher education institutions.

With the aim of proper implementation of relevant provisions of the Laws of Ukraine “On Education” and “On Higher Education”, the Ministry of Education and Science of Ukraine has developed “Methodological Recommendations for Higher Education Establishments in Support of the Principles of Academic Integrity” (2018).

The purpose of the article is to accumulate and present experience of leading Ukrainian universities in assuring research integrity, using such research methods as analysis, synthesis, comparison, systematization of scientific sources and information provided on websites, as well as identify possible ways of improvement of relevant policies and procedures.

Results and discussion

Shaping integrity research environment is an acute issue for higher education today. This is confirmed by the fact that academic integrity is becoming increasingly important to managing academic institutions (*Busch & Bilgin, 2014*). According to Australian researchers, key aspect of research integrity is truth (*Shaw & Satalkar, 2018*). Analysis of the quality of research integrity reports in Japanese academic institutions has revealed lack of regularity of such supervision, the researchers have questioned the ability of academic institutions staff to monitor objectively the process of observance of integrity principles (*Grey et al., 2019*). Analysts of research integrity in Queensland University of Technology (Australia) have proposed integrated approach that combines a comprehensive online course and two related face-to-face courses, which proved efficient in the formation of research culture.

Mastering the online course ensures that all researchers are familiar with their general responsibilities; face-to-face courses integrate specific content into more general courses: 1) the content on researcher's copyright responsibility is integrated into a course on academic writing; 2) the content on research integrity is included into a course on conducting and responding to peer review (*Hooper et al., 2018*).

The problem of shaping academic integrity culture is in the focus of attention of Ukrainian scientists. They state that "adherence to the principles of academic integrity in research is one of the basic principles of scientific ethos" (*Artyukhov & Menshov, 2016: 121*). At the same time "under current conditions of university education in Ukraine the principles of academic integrity are perceived as something abstract, fashionable, often mentioned, but not applied" (*Artyukhov, 2017: 19*).

It is noted that the number of ethics violations in higher education institutions is increasing (*Sopova, 2018*). The relevance of developing the university "Regulations on academic integrity" and "Recommendations on ethical decision-making and ethics in university environment" is confirmed by results of the survey conducted by professors of Vinnytsia National Technical University concerning awareness of importance of maintaining the principles of academic integrity (*Slobodyanyuk, 2018*). Systematic prevention of deviant academic behavior should become a norm of academic life in Ukrainian universities (*Artyukhov, 2016*).

Taking into consideration that research integrity culture in Ukrainian higher education is in the process of formation, it is worth comparing their achievements among each other, but also with the best European practices. Among these practices, the experience of Great Britain as world leader in higher education deserves special attention. For comparisons of Ukrainian and British practices, the documents that serve to promote academic integrity in Ukrainian universities and documents developed by UK Research Integrity Office (UKRIO) have been used, namely: "Self-assessment tool for the concordat to support research integrity" and "Code of practice for research".

"Self-assessment tool for the concordat to support research integrity" as one of the tools for maintaining research integrity provides a detailed list of questions for universities regarding self-evaluation of research integrity policy. For the analysis, we will highlight the

questions from “Self-assessment tool for the concordat to support research integrity” (policies and systems), which, in our opinion, are of prime importance at the stage of developing a system of research integrity in Ukrainian universities, which include:

Do you have an institutional policy concerning research integrity?

Does research integrity policy and other related policies include the following:

- principles that describe values and responsibilities associated with research?
- standards required for research?
- identifying misconduct in research?

In the context of forming a system of research integrity, support is important as it helps organizations and researchers to maintain high ethical standards, establish clear accountability for research governance, promote career development for researchers, provide training and mentoring for young researchers (chapter «Leadership and supervision», «Code of practice for research»).

Three leading Ukrainian universities, in accordance with the National Ranking «Top 200» (2019), have been selected to analyze institutional policies and procedures that assure research integrity: Taras Shevchenko National University of Kyiv, V. N. Karazin Kharkiv National University, and National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic University".

The analysis of the websites of selected universities have shown that none of them has a separate section (page) on research integrity. This made the analysis much more complicated and therefore Statutes, Programs and Strategic Development Plans, Rectors' Reports, University Ethics Codes and other information have been analyzed to collect data on availability and essence of institutional policies and practices for research integrity assurance.

Taras Shevchenko National University of Kyiv sets as its mid-term and long-term priorities achieving and maintaining a world-class level of scientific research; definition and formation of social values and spiritual orientations in educational and scientific processes; development of democracy in university governance ("Taras Shevchenko University of Kyiv 2012-2020 Development Program"). Policies and procedures for ensuring research integrity in the university are present in a number of documents.

For instance, “The University Strategic Development Plan for 2018-2025” defines as one of the goals improving the system of monitoring academic integrity of dissertation theses by applying modern information technologies for technical verification and text analysis on the probability of incorrect text borrowings (Section II. Research and Innovation, p. 9). Awareness of the importance of modernization of university governance system, and research in particular, is confirmed by the following task: "to ensure ethics of governance on the basis of the University Code of Ethics rooted in the principles of mutual respect and positive motivation, extension of powers of university structural units; to create conditions for ensuring full transparency and publicity of the process of development of basic normative documents (provisions, plans, orders, etc.), their public examination and approval”(Chapter VII. University Governance, pp. 56, 57).

Implementation of research integrity policy at this University is based on “Taras Shevchenko National University Code of Ethics” (2017) that includes ethical principles to be observed by university community in their activities (p. 2), and ethical standards of behavior of university community members (p. 3). Emphasis is placed on inadmissibility of violation of ethical principles and standards by members of university community (p. 4); cases of violation of academic integrity (p. 4.1) and responsibility for violation of ethical principles

and standards (p. 5.1) are described, as well as inquiry procedure for violations of ethical principles (p. 5.2); the structure of Ethics Commission and its powers outlined (5. 3).

“Regulation on Organization of Educational Process” (2018) emphasizes that functioning of internal quality assurance system should include, in particular, a system and mechanisms for assuring academic integrity (Section 12. Quality Assurance in Education, p. 12. 1).

Practical steps to ensure research integrity are presented in Rector's Report-2018, which states that the University has two anti-plagiarism systems in place to test dissertations concerning incorrect textual borrowings that meet the basic requirements of academic integrity legislation and have been recommended by Ministry of Education and Science of Ukraine: Strikeplagiarism.com (Poland) and Unicheck (USA).

The main priority of *V.N.Karazin Kharkiv National University* is science and research that underpin the educational process of faculties and departments (Rector's Report-2018), and the main development goals of the university for the period 2010-2020 are to reveal the research potential, to maximize approximation to the main characteristics of a world-class university and to create prerequisites for entry into the top 500 world-class universities according to recognized university rankings («The Program of Development of V. N. Karazin Kharkiv National University for 2010-2020”).

Policies and procedures at the university are based on the "Code of Values of V. N. Karazin Kharkiv National University" that describes ten principal values, including the following key values that contribute to formation of integrity research culture at the university: academic freedom and academic responsibility; enlightenment; openness and tolerance, excellence.

“University Development Strategy for 2019-2025” sets out the vision for university R&D in 2025: they maintain leadership in Ukrainian area, are competitive on the international level, have a good balance of basic and applied research and a high potential for commercialization of results on national and world R&D markets (p. 1). In 2025, the University management should become flexible, non-bureaucratic, project-oriented, based on modern IT technology, with a clear understanding of the strategic university development goals and roadmap for achieving them (p. 5).

“Regulations on the System of Preventing and Detecting Academic Plagiarism in Scientific and Educational Papers of Higher Education Workers and Applicants” (2015), ‘Regulations on Ethics and Bioethics Committee of the Faculty of Medicine” (2018), "The Procedure for Verification of Scientific Papers, Educational Papers and Graduation Papers (Projects) of Higher Education Employees and Applicants Concerning Incorrect Textual Borrowings from Other Documents" (2018) have been developed, and Strikeplagiarism.com (Poland) and Unicheck.com (USA) are used to implement academic integrity policy.

National Technical University of Ukraine “Kyiv Polytechnic Institute” emphasizes further development and improvement of the university's operational model, while gradually narrowing the gap between educational, scientific and innovative components of its activities ("Conceptual Provisions of NTUU" KPI" development strategy for the period 2012-2020”). It is stated that university governance is characterized by decentralization, democratization of university life, and ensuring the transparency of all levels.

Rector's Report 2012–2019 emphasizes that, while observing the principles of high quality education, training and research, the university is committed to the development of academic integrity culture and fighting against plagiarism.

In order to implement academic integrity policy at the University, the “Code of Honor for University Community Members” (2015) has been developed, that defines general moral principles for members of the university community (paragraph 1. 4), as well as the rules of ethical behavior of students and workers (p. 2. 1).

A separate section of the Code is devoted to academic integrity policy (section 3), which formulates the requirements to representatives of University academic community (p. 3. 1), describes types of academic dishonesty (p. 3. 2), and emphasizes obligations of academic community members to maintain academic integrity values (p. 5. 3). The Ethics and Academic Integrity Committee (section 4 of the Code) operates to monitor compliance with moral and legal standards by University community members.

In order to regulate the process of preventing and detecting plagiarism in academic texts authored by academic workers and learners, “Provisional Regulations on Academic Plagiarism Prevention System” (2018) was introduced which is part of the system of internal support of educational and research activities.

The document contains definitions of different kinds of plagiarism (p. 2. 2); a description of measures to prevent academic plagiarism (section 3); types of academic texts subject to mandatory plagiarism testing (section 4); information on the responsible persons and general algorithm of testing academic texts for plagiarism (section 6); the procedure for implementation of measures for plagiarism testing of dissertation theses, manuscripts of monographs, manuscripts submitted for scientific publications and collections of conference papers, seminars, etc. of the University (sections 8-10); a description of responsibility for violation of academic integrity in relation to academic texts (section 11).

Conclusions and suggestions

The analysis of documents that outline policies and procedures for implementation of principles of research integrity in Ukrainian universities, allows to conclude:

1. The formation of research integrity culture is one of top priorities of leading Ukrainian universities. Institutional policies concerning research quality and research integrity are present in all three universities, though access to the documents and relevant information is significantly hampered by the lack of a separate section (page) on research integrity on universities' websites.

2. Ethical principles and ethical standards of university community are set out in codes of ethics, which are key documents in the formation of research integrity culture and to some extent fulfill the function of a standard through which research integrity policy is implemented. However, institutional policies have a narrower focus on research integrity limited to working with academic texts.

3. Universities' codes of ethics identify misconduct in research. At the same time, the description of actions in case of violation of research integrity principles usually lacks clarity (for example, at Taras Shevchenko Kyiv National University "the conclusions of the Ethics Committee are advisory, and University management or head of the unit may take them into account when taking the decision on a violator of the Code of Ethics").

4. The responsibilities of personnel involved in implementation of research integrity policies at universities are fragmented; these are essentially the duties of ethics committee members and workers who implement plagiarism testing.

5. The documents that present strategic university development goals declare development of democracy and decentralization in university governance, attempt to make

university governance flexible, non-bureaucratic, aimed at engagement of all university staff. However, there is no information on the university websites that establishes clear responsibility for research governance.

The process of assuring research integrity in Ukrainian universities may be more effective providing:

- creation of a separate section (page) on research integrity policy on the University website, as it will publicly testify to its existence and purpose;
- development and use of a full-fledged research standard with description of peculiarities of conducting research with participation of humans and animals, use of human materials; personal data of people; procedures relating to the identification of conflicts of interest in research; health and safety measures; intellectual property protection; data collection and storage, monitoring and audit; peer review at all stages of research;
- enhancement of transparency and openness of institutional policies regarding ethical principles in research that foresees availability of contacts of all people involved; publication of ethical committee decisions; publicity of information on violation of research integrity policy etc.;
- creation of opportunities for qualified consultations in order to avoid possible disruption, availability of systematic training and publicly available educational materials, career development and advancement for researchers;
- development and application of a procedure for investigating suspected violations of research integrity which would ensure diligence and fairness;
- annual evaluation of progress in developing research integrity culture in university environment;
- increasing the efficiency of research governance, which involves broad involvement of university community members in process of shaping research integrity culture.

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