

# PEDAGOGICAL STRATEGIES FOR ENSURING ACADEMIC INTEGRITY AND ANTI-PLAGIARISM AMONG UNIVERSITY STUDENTS IN RUSSIA

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## Abstract

The need to address the topic was prompted by several factors, the most acute being globalization, digitalization and integration of Russia into the world academic community, which, along with the benefits, has equally caused multiple violations of academic integrity and jeopardized research ethics and dissemination of scientific knowledge. The globalized digital world poses both legal and moral threats to academic integrity, as today's Z students often do not even realize that technologies and much of the Internet or electronic sources they utilize for academic needs may be copyrighted and, thus, limited in use and application. It becomes apparent that students should be properly informed and instructed on intellectual property rights (IPRs), their protection and potential pitfalls of any related illegal practice for academic results, although the use of other people's ideas, at least in part, is ironically one of the most important aspects of educational and research process. Likewise, this also creates one of the main contradictions in academic reality: although students are expected to study, research and cite theoretical works of scholars, they must also produce their own original works.

Russian universities have long been taking different disciplinary measures to reduce the incidence of academic dishonesty or misconduct, including deception, collusion, falsification, impersonation, multiple submissions, and especially plagiarism (both analog and digital). However, the latest statistics on verification of student papers through Antiplagiat (a Russian plagiarism detection tool similar to the well-known Turnitin and iThenticate services) revealed cases of massive plagiarism among the future bachelors and magistrates. There is an urgent need to rethink the morality and ethics of higher education (HE) in Russia and apply pedagogical strategies that would revive academic integrity and culture against academic dishonesty and plagiarism. Such strategies should be interdisciplinary and comprehensive in nature and address the core values of academic integrity, that is, honesty, trust, fairness, respect, and responsibility, which are fundamental to academic community and excellence.

The aim of this work was to analyze the best pedagogical strategies and practices from around the world and identify those that are applicable to Russia. We examined the relevant experience in terms of its validity, usability and potential impact on both the academic process and research results. We also singled out and evaluated both external and internal factors that determine and influence the process of development and growth of young researchers; clarified the conceptual apparatus; presented a typology of academic violations and formulated a treatment plan to eliminate them. The main finding of the study is a set of pedagogical strategies to fully promote academic integrity in HE.

Keywords: university, students, pedagogical strategies, academic integrity, research ethics, anti-plagiarism, intellectual property rights (IPRs).

## 1 INTRODUCTION

The need to study the growing problem of plagiarism among university students and the strategies for its cure is highly mediated by both external and internal factors that accompany the process of higher education in Russia. Globalization, internationalization, digitalization and integration can be beneficial in terms of their increasing influence on educational, social and intercultural systems around the world [1]. The positive aspects of these external factors include *inter alia* the expanded globalized educational environment; improved academic quality of teaching, learning and communication; harmonized standards of intellectual and organizational dimensions; enhanced cooperation in academic, scientific and research fields; widened cross-border initiatives, projects and programs for international students and teachers; increased institutional and workforce competitiveness, etc, [2; 3]. The development of digital technology has facilitated the transition from an industrial based society to an information-based

one and provided greater efficiency in the acquisition of high-order knowledge through better access to content, more efficient lesson planning, classroom management, etc. [4].

Along with the benefits, the new trends have also caused a lot of frustration in the Russian academic community as a result of the discovery that not all changes have been as good as previously thought. For example, most of the consequences of ratifying the Bologna Declaration in 2003 turned out to be myths for Russians, while the real situation in this field, including the alleged integration into the European Higher Education Area, academic mobility across Europe, ways to reform the domestic system of higher education within the parameters of the Bologna Process still encounter considerable opposition, especially from teachers and educators [5]. Another disappointment in this context concerns digitalization, although it is undeniable that digital transformation has brought numerous benefits to educational institutions and beyond. Digitalization has a proven impact on educational systems and allows them to operate with greater transparency and efficiency, by adding broader global perspectives, improved virtual communication and collaboration capabilities, increased flexibility, expanded teaching and learning modes, enhanced self-motivation, improved critical thinking and technical skills, extended competencies and time management, etc. [6]. At the same time, many institutions report that quick and easy access to the Internet and computers have equally caused numerous cases of plagiarism among their students, ranging from minor violations of academic integrity to serious cases that threaten research ethics and dissemination of scientific knowledge [7].

The internal factors that may pose moral threats to academic integrity can range from the common lack of knowledge of legal issues of Intellectual property rights to outright dishonorable intentions. More often than not, today's Z students don't even realize that technology and much of the Internet or electronic sources they use for academic purposes can be copyrighted and, thus, restricted in use and application. It becomes clear that there is a need for strategic pedagogical planning on how students should be properly informed and instructed about intellectual property rights (IPRs), their protection, and the potential pitfalls of any illegal activities associated with them, even for academic purposes [6].

The research question was raised about the available pedagogical strategies that can ensure academic integrity and anti-plagiarism among students of Russian universities. We took into account the need to support student publication activity for the competitive requirements of the university [8]. We also aimed to reduce the incidence of plagiarism, whatever the reasons for cheating students may choose to justify (for example, their desire to get a good grade, because of the fear of failing, etc.), although we realize that the use of other people's ideas, at least in part, is ironically one of the most important aspects of academic and research process. Likewise, this part of academic writing also creates one of the main contradictions in academic reality: although students are expected to study, research and cite theoretical works of other scholars, they must also produce their own original works.

## **2 METHODOLOGY**

The study was conducted within a framework of social, pedagogical, integrative, contextual, competence-based and comparative approaches, covering all aspects of academic activities of teachers and students in the modern learning environment of Russian university. Both qualitative and quantitative research methods were used to collect and analyze the relevant data. Analysis, synthesis and comparison were used to study and summarize scientific information from both Russian and foreign sources. Observations, questionnaires and survey were carried out within the experimental section followed by a subsequent statistical analysis using an open-source statistics program JASP.

A holistic approach allowed creating a classification of the most common types of plagiarism and academic misconduct among the Russian students. We also identified the most relevant pedagogical strategies that might help to cure or reduce the cases of plagiarism among university students so that they would respect the fundamental values of academic integrity (honesty, trust, fairness, respect, and responsibility [9]), follow the high academic standards and comply with the policies of their educational institutions. We examined the existing experience of universities in Europe in terms of their validity and usability in Russia and measured their potential impact on both the academic process and research results. We also singled out and evaluated both external and internal factors that determine and influence the process of development and growth of young researchers in modern realities. We also clarified the conceptual apparatus and formulated a set of pedagogical strategies allowing reducing plagiarism and promoting academic integrity for competitive growth of higher education in Russia.

### 3 RESULTS AND DISCUSSIONS

Academic integrity – is the term used to refer to some of the most important values of the university community. It is a commitment to five fundamental values, namely: honesty, trust, fairness, respect, and responsibility [9]. Academic integrity, thus, is the commitment to and demonstration of honest and moral behavior in the academic settings. This is most relevant at the university level as it relates to providing credit to other people when using their ideas. In simplest terms, it requires acknowledging the contributions of other people. It is known that one of the most important aspects of academic writing is making use of the ideas of other people. This is important as students need to show that they have understood the material and that they can use various ideas and findings in their own way [9].

In fact, the ability to write from other texts is an essential skill for every student, which requires a lot of time and efforts. This means that students as a major part of their academic experience need to pass through the complex processes of selecting suitable sources, reading, note-making, planning, drafting, revising, and editing. To move along, students need to develop critical approach to reading, note-making, summarizing, paraphrasing, quoting, and referencing. Therefore, most tasks and assignments at university will be aimed at developing the skills of understanding precisely the author's original style and purpose, which are transferable to academic writing competences [10]. In addition, students must learn how to avoid plagiarism, a form of academic misconduct, which may lead to failure on the plagiarized assignment and may result in failure of the course. This means that students need to set time aside to brainstorm, pre-write, plan, draft, and revise [9]. If students leave their assignments to the last minute, they tend to become overwhelmed by the writing task and panic by looking for an alternative, which is usually plagiarism. But students must do everything possible to avoid plagiarism.

Academic integrity is based on the moral code or ethical policy of university associated with high standards of academic excellence, which fundamentally depends upon such values that specifically include avoidance of cheating or plagiarism; maintenance of academic standards; honesty and rigor in research and academic publishing, etc. [11]. It is a responsibility of both the university professors and their students. Every participant in academic community has obligations to support such practices that promote academic integrity, prevent dishonesty, and punish offenses when they occur. The academic staff should provide examples of good practice in academic integrity by acknowledging appropriately the works, designs, ideas and words of others in their teaching and research. They are expected to fairly use citations, references and acknowledgements, thus, giving their students examples of decent behavior [12]. Students in their turn are expected to follow such practices in support of their academic undertakings and skills. It is imperative that students adopt and follow the principles and standards of their community, which will ensure their behavior to be consistent with those principles and standards.

Individual integrity in this respect is vital to the academic environment because education involves the search and acquisition of knowledge and understanding, which are intangible. During their academic career at university, students write original papers, academic assignments and give oral presentations that require research in libraries, laboratories and on the Internet. Academic assignments exist to help students learn; grades exist to show how fully this goal is attained. Therefore, any work or grades shall result from the student's own motivation and efforts. Evaluation of every student's level of knowledge acquisition is an essential part of the learning process; it requires tangible means such as reports, homework, exams, etc. Any act that interferes by misrepresentation of the relationship between the work under resulting evaluation and the student's actual state of knowledge comprises academic dishonesty. More often, incidents of academic dishonesty are found in domestic and international Intellectual property laws. Thus, students should be properly informed and instructed on intellectual property rights, their protection and potential pitfalls of any related illegal practice in that field [13].

So, what can be regarded as academic dishonesty or academic misconduct? Most commonly it is defined as any type of cheating that occurs in relation to a formal academic assignment. Academic dishonesty has been documented in most of educational settings, and has been exercised with varying degrees of intensity. Today, the educated society tends to express a very negative attitude to academic dishonesty. It is regarded as one of the most difficult and serious issues that educators deal with [14]. The problem worsened with the advent of digital technologies largely due to the perceived anonymity of the Internet. Technology has increased the opportunities for academic dishonesty exponentially. According to a recent survey by Common Sense Media – the leading source of entertainment and technology recommendations for families (<https://www.commonsensemedia.org/>), 35% of students use their personal gadgets to cheat, by using the Internet to look up answers, by text messaging one another for help, or by looking at information stored on their phones or MP3 players. Students also use various tech-based services that can quickly be purchased online in accordance with the specific assignment requirements. While detection and punishment for academic dishonesty is unavoidable, teachers should

mainly focus their attention on the prevention of such cases. University staff is, thus, recommended to keep students clearly aware of the policies on academic integrity, fair conduct, and due communication from the first day they start their university courses [14].

Academic dishonesty comes in many different forms. The survey conducted on 200 participants, first- and second-year law students from the bachelor program of Kazan federal university (Russia), showed that most common forms that constitute acts of academic dishonesty include: cheating – as an attempt to gain an improper advantage in academic evaluation by using unauthorized materials, information, notes, study aids or other devices (64%); aiding and abetting – as an act of complicity to intentionally or knowingly encourage, enable, cause or attempt to help another to commit an act of academic dishonesty (58%); collusion – as a process of working jointly with others when it is not permissible or when the instructor does not authorize working in a group (43%); falsification – as a violation of academic honesty by a willful perversion of facts or altering information for use in any academic exercise (34%); and fabrication – as a breach of academic honesty to fabricate or make-up research data or results by the intentional invention, counterfeiting or unauthorized alteration of any information or citation for use in an academic exercise (24%). The research identified that there is a disagreement between students and the faculty regarding the behaviors that constitute academic dishonesty. Most students do not feel they understand institutional regulations and legal restrictions too.

Many students think that plagiarism occurs only when someone knowingly presents another person's language or ideas or even paper as if it was their own work (78%). In fact, plagiarism includes any instances of using the words, ideas, answers, or works of other writers without providing clear acknowledgement of the original author and/or accurate citation [15]. Thus, students should feel comfortable browsing the Internet in search of information related to their research topic since it is always an excellent brainstorming to learn what kind of information is being distributed on the web about the particular issue. It is also helpful to use various reference books such as dictionaries and encyclopedias to learn about the new ideas or viewpoints. However, any time students consult a work, and use another person's ideas, they need to cite these ideas as well. When students attempt to cut-and-paste various sentences found at a number of different web sites or works, and incorporate them into their work without properly citing them, this is called plagiarism. In order to avoid plagiarism while researching electronic sources or using information from the published or unpublished works students must fully and clearly acknowledge the original writer and employ the correct citation methods [16].

It is obvious that plagiarism in all sectors of education and research has tremendously risen over the past years [17]. Most of the university teachers (89%) associate this increase with computers and the Internet. They believe that technologies changed the nature of plagiarism, made it easier and more common. Normally, students accused of plagiarizing claim to be unaware of their wrongdoing, or the need to reference the others work. In some cases, unfortunately, this is true. It is essential, thus, to involve students in discussion about "academic honesty" and "academic integrity", whilst also applying disciplinary measures in serious cases. Students should also know what can be claimed as plagiarism as there are many ways to steal ideas of other people while writing from other texts, both intentionally and unintentionally. To be honest, it is highly important to avoid even the suspicion of plagiarism [17].

There are different types of plagiarism and all are serious violations of academic integrity. We have collected and defined the most common types of plagiarism, which are often "practiced" by our students. "Direct plagiarism" – is the most common and serious form of plagiarism, which involves taking or borrowing the exact words from someone else's unacknowledged source or writing, whether intentionally or not, and passing it off as your own (74%). "Accidental plagiarism" – occurs when students neglect to cite the sources, or unintentionally paraphrase a source by using similar words, groups of words, or sentence structure without a due attribution (66%). "Mosaic plagiarism" – relates to borrowing phrases from particular sources without using quotation marks, or finding synonyms for the author's language while keeping to the same general structure and meaning of the original (33%). "Patchwork plagiarism" – occurs when students take several different phrases or passages from several different authors and patches the pieces together to call this new "venture" their own (25%).

Today most of the universities are using electronic anti-plagiarism software. The latest statistics on verification of student papers through Antiplagiat (a Russian plagiarism detection tool similar to the well-known Turnitin and iThenticate services) at Kazan federal university revealed cases of massive plagiarism among future bachelors and magistrates. There is an urgent need to rethink the morality and ethics of higher education in Russia and apply pedagogical strategies that would revive academic integrity and research culture against academic dishonesty and plagiarism [18]. Such strategies should be interdisciplinary and comprehensive in nature [6; 10] and address the core values of academic integrity and research ethics, these are: honesty, trust, fairness, respect, and responsibility [9].

## 4 CONCLUSION AND RECOMMENDATIONS

When it comes to plagiarism in academic or scholarly work, some people think of plagiarism as being primarily a student problem. However, plagiarism remains a problem long after the students graduate and become scientists or researchers. In 2013, iThenticate, a commercial plagiarism detection software (<https://www.ithenticate.com/>), conducted the online survey "Research Ethics: Decoding Plagiarism and Attribution in Research" in order to clarify and understand the issue of plagiarism in academic community. Some 334 research scientists from 50 countries were asked then to rank 10 different types of plagiarism due to their severity and seriousness. To facilitate their exploration, iThenticate asked the researchers to compare the earlier findings with their personal experiences of plagiarizing. Based on the feedback, 10 issues were sorted by perceived severity and commonness. It was revealed that researchers quite often use secondary sources (88%) and invalid sources (79%); reuse or duplicate works from their own previous studies and papers without a due attribution (75%); paraphrase another person's writing or rewrite another person's words without citation (67%); provide repetitive research (62%) or submit a single paper to multiple publications as a replication (51%); provide misleading attribution or inaccurate/ insufficient author information (41%); violate a code of conduct or act in an illegal way through the unethical collaboration (16%); copy and paste another author's words (verbatim) or works without providing proper attribution, indentation or quotation marks (11%); participate in the extreme scenario of complete plagiarism by depriving the original authors of credit for their work and potentially kidnapping their publication without doing any original work (5%).

The results presented by iThenticate are grim enough to encourage teachers to instruct their students, while they are writing from other texts, to deeply remember that the main voice should be their own [19; 20]. Students should remember that there are many ways to avoid plagiarism though still using someone else's ideas and citing other authors, with reporting and direct citation being the two most common tools. Reporting simply includes the set of instruments allowing presenting the other writer's ideas in your own words. Reporting uses such tools as paraphrase, summary, response writing and synthesis to acknowledge another author's ideas. Students can either paraphrase, if they want to keep the length the same; summarize, if they want to make the text shorter; respond, if they need to present their response to the main ideas of other authors; or synthesize, if they need to use information from several sources. Thus, students can feel free to extract, summarize or synthesize the important points, or respond to the main ideas of the other authors but in all cases, they need to acknowledge other people's works by making it clear from whom and where they get the ideas they are discussing and what their point of view is. Occasionally, students may want to repeat or copy the words, a brief passage, phrase or excerpt from another author's book, article, lecture, etc., as by way of authority or illustration. Such exact reciting as a means of illustrating or supporting some statement, usually with the acknowledgment of the source, is known as a direct quotation. As we see, quoting, paraphrasing, summarizing, responding and synthesizing are all different ways of incorporating another writer's work into one's own writing without attempting to plagiarize or cheat. These strategies along with other pedagogical initiatives may help students build true research skills and develop scientific competence.

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