

ACADEMIC INTEGRITY AT THE UNIVERSITY OF MONTENEGRO: PATHWAY TO CERTIFICATION

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Abstract

Academic dishonesty is one of the major challenges in higher education. In developed countries, higher education institutions have, for some years now, begun to put in place strategies and mechanisms to combat academic misconduct. In developing countries, such as Montenegro, the formalisation of processes to strengthen academic integrity is a relatively new concern. In this paper, we will analyse the framework for the development of a determined academic integrity strategy, which resulted in the international certification of the University of Montenegro. Based on the literature review on academic integrity and using the case analysis method, we highlight the steps in the certification process. We will show how the holistic approach that has been adopted strengthens the culture of academic integrity.*

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1. Introduction: the Montenegrin context

Academic dishonesty has been recognized as a global problem in higher education that takes many different forms (e.g. cheating, plagiarism, falsifying/fabricating, aiding and abetting academic dishonesty, etc.).⁴⁷⁶ In a recent survey of 70,000 high school students in the United States, McCabe, Butterfield, and Treviño reported that 64% of students admitted to cheating on a test, 58% admitted to plagiarism, and 95% said they had participated in some form of cheating.⁴⁷⁷ What is more, a study by Jones revealed that 92% of students responding to a survey admitted they had cheated or knew someone who had cheated.⁴⁷⁸ Bernardi and others found that, even though students know that cheating is not acceptable, a majority of them cheated in the course of their education.⁴⁷⁹ These findings suggest that cheating is accepted as almost normative behavior among students.⁴⁸⁰

Consequently, *The Glossary for Academic Integrity* was developed, and several taxonomies were created with the aim of facilitating

⁴⁷⁶ A. Ahmadi, 'Plagiarism in the Academic Context: A Study of Iranian EFL Learners', *Research in Ethics*, 10 (2014), 151-68; S. Peković and others, 'What Drives Students' Intention to Plagiarise in Montenegro: The Moderating Role of text Matching Software', in *Integrity in Education for Future Happiness*, ed. by Z. R. Zhan, C. Hill, and C. Foltyněk (Brno: Mendel University Press in Brno, 2020), pp. 127-54.

⁴⁷⁷ D. L. McCabe, K. D. Butterfield, and L. K. Treviño, *Cheating in College: Why Students Do It and What Educators Can Do about It* (Baltimore: Johns Hopkins University Press, 2012).

⁴⁷⁸ D. L. R. Jones, 'Academic Dishonesty: Are More Students Cheating?', *Business Communication Quarterly*, 74(2) (2011), 141-50.

⁴⁷⁹ R. A. Bernardi and others, 'Examining the Decision Process of Students' Cheating Behavior: An Empirical Study', *Journal of Business Ethics*, 50 (2004), 397-414.

⁴⁸⁰ D. Vučković and others, 'Attitudes Towards Cheating Behavior During Assessing Students' Performance: Student and Teacher Perspectives', *International Journal for Educational Integrity*, 16 (2020), Article 13.

systematization in the field.⁴⁸¹ In addition, different strategies have been adopted at the international, national, institutional, and individual levels to combat academic dishonesty and enhance a culture of integrity.⁴⁸² Institutions have developed a wide range of mechanisms to install, promote, and spread academic responsibility among members of the academic community. They are now trying to adopt policies and activities that support student learning by educating both staff and students about responsible behavior in the learning environment.⁴⁸³ The effectiveness and impact of policies such as honor codes, online tutorials, academic integrity laws, and punishments have been extensively analyzed by scholars around the world.⁴⁸⁴

The majority of previous analyses on the issue have focused on developed countries, even though less developed countries are not

⁴⁸¹ L. Tauginienė and others, *Glossary for Academic Integrity* (Brno: European Network for Academic Integrity (ENAI), 2018); L. Tauginienė and others, 'Enhancing the Taxonomies Relating to Academic Integrity and Misconduct', *Journal of Academic Ethics*, 17 (2019), 345-61.

⁴⁸² J. Orr, Jr., 'Developing a Campus Academic Integrity Education Seminar', *Journal of Academic Ethics*, 16(3) (2018), 195-209; P. Mahabeer, and T. Pirtheepal, 'Assessment, Plagiarism and Its Effect on Academic Integrity: Experiences of Academics at a University in South Africa', *South African Journal of Science*, 115(11-12) (2019), 1-8.

⁴⁸³ T. Bretag and S. Mahmud, 'A Conceptual Framework for Implementing Exemplary Academic Integrity Policy in Australian Higher Education', in *Handbook of Academic Integrity*, ed. by T. Bretag (Singapore: Springer, 2016), pp. 463-80.

⁴⁸⁴ D. L. McCabe, L. K. Treviño, and K. D. Butterfield, 'Honor Codes and Other Contextual Influences on Academic Integrity: A Replication and Extension of Modified Honor Code Settings', *Research in Higher Education*, 43 (2002), 357-78; T. B. Gallant and P. Drinan, 'Toward a Model of Academic Integrity Institutionalization: Informing Practice in Postsecondary Education', *The Canadian Journal of Higher Education*, 38(2) (2008), 25-43; R. W. Belter and A. du Pré, 'A Strategy to Reduce Plagiarism in an Undergraduate Course', *Teaching of Psychology*, 36 (2009), 257-61.

exempt from this problem.⁴⁸⁵ Accordingly, a survey by Ives and others of more than 1,000 students at six universities in Romania showed that more than 90% of the students reported having engaged in some type of academic dishonesty.⁴⁸⁶ Moreover, media throughout the less developed countries repeatedly report scandals related to the violation of academic integrity at universities in these areas. Most of these scandals have related to students and researchers, but high-profile personalities have also been implicated. Although this problem is alarming and tarnishes the reputation and development of higher education institutions (HEIs) in less developed countries, research dealing with academic dishonesty in these countries remains quite scarce.⁴⁸⁷ Therefore, Ana and others urged that the issue of academic integrity should be examined in the context of less developed countries as well.⁴⁸⁸

The following pages present a case study concerning our experience at the University of Montenegro. The academic integrity certification process has enabled the university to implement a holistic approach in order to fight against academic dishonesty. The first author of this chapter was the leader of this initiative, while the third author was part of the group in charge of the certification process. They engaged in real participant observation throughout the process.⁴⁸⁹ It is therefore with the double role of researchers and group members that we will describe the

⁴⁸⁵ A. M. Carnero and others, 'Plagiarism, Cheating and Research Integrity: Case Studies from a Masters Program in Peru', *Science and Engineering Ethics*, 23(4) (2017), 1183-97; B. Ives and others, 'Patterns and Predictors of Academic Dishonesty in Romanian University Students', *Higher Education*, 74(5) (2017), 815-31.

⁴⁸⁶ Ives and others, 'Patterns and Predictors'.

⁴⁸⁷ Peković and others, 'What Drives Students' Intention to Plagiarise'; Vučković and others, 'Attitudes Towards Cheating'.

⁴⁸⁸ J. Ana and others, 'Research Misconduct in Low- and Middle-Income Countries', *PLoS Medicine*, 10 (2013), Article e1001315.

⁴⁸⁹ *Encyclopedia of Case Study Research: Vol. I and II*, ed. by A. Mills, G. Durepos, and E. Wiebe (Thousand Oaks, CA: Sage, 2010).

steps that the University of Montenegro took to obtain its certificate relating to academic integrity.

2. The preliminary phase of the integrity strategy

Since ethics is given the highest priority in education and research in the European Union (EU), Montenegro, which is a candidate country to join the EU, started making significant efforts to strengthen academic integrity in recent years. The first steps in understanding the needs of Montenegrin HEIs in the field of academic integrity were taken by The Council of Europe's ETINED platform, which conducted extensive regional research. ETINED reached several important conclusions about Montenegrin HEIs, such as that they are still evidently dominated by traditional teaching and less oriented toward the learning process and that the learning environment is strongly marked by extrinsic motivation (points, grades, etc.). In addition, there are many employment-related problems, which is another very strong demotivating factor; cheating starts even before students enter university.⁴⁹⁰ Furthermore, the ETINED report indicated that there is a lack of clear guidelines and procedures on how to preserve and enhance academic honesty within the academic community as a whole. Thus, the lack of proper integrity policies, strategies, and mechanisms and the general confusion when it comes to what actually represents a violation of academic integrity have been identified as major impediments to strengthening the culture of academic honesty. According to the report, more research, training, transparency, and prevention efforts are needed to successfully combat academic misbehavior. Figure 1 illustrates the values for each variable in the Academic Integrity Maturity Model in the context of Montenegro.

⁴⁹⁰ Council of Europe Platform on Ethics, Transparency and Integrity in Education (ETINED), *South-East European Project on Policies for Academic Integrity—Vol. 5* (Strasbourg: Council of Europe, 2018).

Figure 1. *Academic Integrity Maturity Model radar chart for Montenegro.* Source: ETINED.⁴⁹¹

Based on the ETINED report, Montenegro undertook several important initiatives, such as the adoption of the Law on Academic Integrity (adopted in March 2019), which aims to precisely define forms of academic misconduct and penalties for violating the principles of



academic integrity. In collaboration with international partners such as the Council of Europe, the government appointed the National Ethics Board and acquired plagiarism detection software in order to strengthen HEIs' capacity to combat academic dishonesty. Consequently, the University of Montenegro (UoM), as the sole public university in the country, also undertook significant actions to support the government's efforts to enhance overall academic culture, deliver policy recommendations, educate and train students and researchers about anti-plagiarism, and increase institutional capacities to combat plagiarism and other forms of academic dishonesty. Acknowledging the importance of academic integrity as one of the pillars of institutional development, UoM organized various seminars, workshops, and round tables to strengthen the understanding of ethical standards and behaviors in higher education, analyze existing strategies, and adopt new ones to

⁴⁹¹ ETINED, *South-East European Project*, p. 75.

reduce plagiarism and academic dishonesty. This phase contributed to an understanding of the obstacles and the key players' reluctance.

University of Montenegro

The University of Montenegro, the only public higher education institution in Montenegro, was founded in 1974. It consists of nineteen faculties and three research institutes. It is an integrated HEI with approximately 20,000 enrolled students and 1,129 academic, professional, and non-academic staff members. Teaching at UoM is organized in accordance with the principles of the Bologna Declaration.

Montenegro signed the Bologna Declaration in 2003, and the new principles have been implemented at the University of Montenegro since 2007—the year when first programs were accredited. The Bologna reform was a major challenge in the development of UoM, as it was necessary to develop and adopt completely new legislative framework that was in accordance with the emphasized principles. The whole process of introducing the new model was marked by significant controversies—the public was not fully satisfied with this reform, and dissatisfaction with higher education was mainly attributed to the Bologna Declaration or to its unskilled implementation.⁴⁹² However, when Bologna Declaration was adopted, new documentation was created for the introduction of three study cycles (bachelor's, master's, and doctoral), new rules for each cycle were developed and adopted, curriculum forms were designed, etc. To date, UoM's academic and administrative staff have made many efforts and all three study cycles have been significantly improved. Since the 2016 academic year, all curricula at UoM are learning-outcome-oriented.

⁴⁹² Đ. Perović and D. Vučković, 'Success in Studying at the University of Montenegro: Is There Hyper-Production of Diplomas?', *Interdisciplinary Description of Complex Systems*, 17 (2019), 385-402.

Since the 2017–2018 academic year, all the programs have been organized according to the 3+2+3 model (three years of bachelor’s studies + two years of master’s studies + three years of doctoral studies, except in the regulated professions). Study programs are harmonized with those at relevant European universities; along with a significant number of cooperation agreements and exchange programs, this encourages and enables mobility within Europe for students, faculty, and staff.

The preparatory analyses, evaluations, and consultations highlighted the need to adopt a more comprehensive, holistic approach to combating academic dishonesty, based on the prevention of unethical behaviors at the institutional level.⁴⁹³ As suggested by McCabe, Butterfield, and Treviño, both formal systems (e.g. administrative leadership, values, policies, etc.) and informal processes (e.g. presence of role models, norms, rituals, myths, language, etc.) must be combined in order to influence students’ academic values and behaviors and improve the general culture of academic integrity.⁴⁹⁴ Several scholars have shown that relying on particular practices related to academic integrity will not yield significant improvements.⁴⁹⁵ A holistic approach that is developed

⁴⁹³ W. L. Kibler and others, *Academic Integrity and Student Development: Legal Issues and Policy Perspectives* (Asheville, NC: College Administration Publications, 1988).

⁴⁹⁴ McCabe, Butterfield, and Treviño, *Cheating in College*.

⁴⁹⁵ T. B. Gallant, *Academic Integrity in the Twenty-First Century: A Teaching and Learning Imperative* (San Francisco: Jossey-Bass, 2008); W. Sutherland-Smith, ‘Retribution, Deterrence and Reform: The Dilemmas of Plagiarism Management in Universities’, *Journal of Higher Education Policy and Management*, 32(1) (2010), 5-16; J. M. Lang, *Cheating Lessons: Learning from Academic Dishonesty* (Cambridge, MA: Harvard University Press, 2013); E. J. Morris and J. Carroll, ‘Developing a Sustainable Holistic Institutional Approach: Dealing with Realities “on the Ground” When Implementing an Academic Integrity Policy’, in *Handbook of Academic Integrity*, ed. by T. Bretag

with regard to the institutional context has been identified as most effective way of boosting academic integrity.

Accordingly, in 2018, UoM decided to start the process of certification in the field of academic integrity in order to incorporate into its core strategy a culture of academic integrity that would shape students' commitments to moral behavior and opinions regarding academic (mis)conduct.⁴⁹⁶ The university wanted to acquire a certificate that would demonstrate its commitment to academic integrity, which according to Basso, is crucial to achieve a sustainable ethical environment with less academic misconduct.⁴⁹⁷ This chapter presents a case study of UoM's experience in the academic integrity certification process, which enabled the university to establish a more holistic approach to combating academic dishonesty. In other words, we describe the steps that UoM undertook to obtain the certificate related to academic integrity. In addition, we discuss ongoing and existing activities stemming from the certification process in the field of academic integrity.

3. A holistic approach toward academic integrity

3.1 The initiation of the certification process

In March 2018, representatives of the University of Montenegro visited the international Institute of Research and Action on Fraud and Plagiarism in Academia (IRAFPA). IRAFPA has become a leading

(Singapore: Springer, 2016), pp. 449-62; R. L. Young, G. N. S. Miller, and C. L. Barnhardt, 'From Policies to Principles: The Effects of Campus Climate on Academic Integrity, a Mixed Methods Study', *Journal of Academic Ethics*, 16(1) (2018), 1-17.

⁴⁹⁶ Young, Miller, and Barnhardt, 'From Policies to Principles'.

⁴⁹⁷ S. K. Basso, 'Experiences with and perceptions of academic dishonesty at Lehigh University: a plan to improve a campus culture that values integrity' (2014).

institution in the area of the academic integrity. In addition to research activities, IRAFPA provides various types of training and institutional support related to academic integrity. It also helps individuals and institutions affected by academic fraud or plagiarism and creates policies and methodological protocols with respect to fraud and plagiarism. Note that the study visit, as well as the whole certification process, was organized as part of the Council of Europe's *Strengthen Integrity and Combat Corruption in Higher Education* project, which has been implemented in Montenegro within the framework of the *Horizontal Facility for the Western Balkans and Turkey*, jointly funded by the European Union and the Council of Europe (CoE) and implemented by the CoE. The productive discussions during the visit resulted in UoM's initiative to create an academic environment, with the support of IRAFPA, that sustains all principles of academic integrity, which would be further confirmed by acquiring certification in the field of academic integrity. In fact, the idea was that certification would clearly demonstrate a comprehensive institutional commitment to promoting academic integrity and involve all the community members in the development and maintenance of the integrity principles.⁴⁹⁸ Apart from assuring a holistic approach that encompasses various activities, the benefit of certification is also related to the fact that it leads to increased competitiveness and external visibility.⁴⁹⁹ As Peković argues, certification is an important tool for signaling the institution's general capability and increasing its legitimacy.⁵⁰⁰

⁴⁹⁸ B. Whitley and P. Keith-Spiegel, 'Academic Integrity as an Institutional Issue', *Ethics and Behavior*, 11(3) (2001), 325-42.

⁴⁹⁹ M. J. Manatos, C. S. Sarrico, and M. J. Rosa, 'The European Standards and Guidelines for Internal Quality Assurance: An Integrative Approach to Quality Management in Higher Education?', *The TQM Journal*, 29(2) (2017), 342-56.

⁵⁰⁰ S. Peković, 'The Determinants of ISO 9000 Certification: A Comparison of the Manufacturing and Service Sectors', *Journal of Economic Issues*, 44(4) (2010), 895-914.

UoM started the certification process in academic integrity in July 2018. The first stage of the process was organized through a series of seminars held at the university. The objective was to familiarize the wider academic community and the university's management with the importance of academic integrity. The second stage involved the establishment of the working group that was in charge of coordinating all the necessary activities and tasks during the process in accordance with IRAFPA's requirements. The working group had to complete the *Academic Integrity Charter* defined by IRAFPA with the involvement of all the relevant stakeholders. In addition, the working group held several meetings with external consultants to ensure that the process was feasible and ran smoothly. More specifically, the IRAFPA experts closely monitored the university's progress, suggesting aspects that should be improved in order to obtain certification.

IRAFPA has developed guiding principles, the Academic Integrity Charter, that candidate institutions for certification should follow. The following sections explain the ten steps of the certification methodology.⁵⁰¹ Figure 2 illustrates the methodology. For each step, we provide theoretical background in order to benchmark UoM's activities against established principles and mechanisms recognized in the literature. Thus, before presenting each step in the certification process in the context of UoM, we draw on the previous literature to understand how theory and practice come together in creating an environment of academic integrity.

⁵⁰¹ For more information, see:

<https://irafpa.org/en/methods/guidelines/responsible-institution/>

Figure 2. The certification methodology.



3.2 *Commitment of governing bodies*

The commitment of organizational leaders is critical for promoting a culture based on academic integrity.⁵⁰² Moreover, Eury and Treviño suggested that multiple stakeholder involvement is the key factor in the

⁵⁰² J. Weber, 'Implementing an Organizational Ethics Program in an Academic Environment: The Challenges and Opportunities for the Duquesne University Schools of Business', *Journal of Business Ethics*, 65 (2006), 23-42; J. L. Eury and L. K. Treviño, 'Building a Culture of Honor and Integrity in a Business School', *Journal of Management Education*, 43(5) (2019), 484-508.

implementation of practices related to academic integrity.⁵⁰³ Cole and Kiss found that the most appropriate model for combating academic dishonesty is one that involves all three major constituencies: students, faculty, and administrators.⁵⁰⁴ Therefore, members of the academic community should share responsibility for creating a learning environment that supports academic integrity.

At UoM, as the report *Academic Integrity at the University of Montenegro: Policy and Practice* shows, the rector supported the whole process.⁵⁰⁵ It was the rector's decision to adopt the integrity plan. Then an integrity manager was appointed, whose main task was to coordinate implementation and improvement of the integrity plan. Each faculty appointed an academic integrity officer whose main task was to spread the culture of integrity within the unit and monitor the implementation of good practices, such as the use of anti-plagiarism software, guidance of students in terms of academic writing, etc. Similarly, the university administration showed great dedication to establishing and formalizing the culture of integrity. Finally, students were repeatedly reminded of their moral obligations and of punishments for violating academic integrity.

3.3 Human and financial organization

To combat academic misconduct, institutions need to allocate the necessary resources, both human and financial.⁵⁰⁶ Regarding human resources, the appointment of an academic integrity officer at the

⁵⁰³ Eury and Treviño, 'Building a Culture of Honor'.

⁵⁰⁴ S. Cole and E. Kiss, 'What Can We Do About Student Cheating?', *About Campus: Enriching the Student Learning Experience*, 5(2) (2000), 5-12.

⁵⁰⁵ S. Peković and others, *Academic Integrity at the University of Montenegro: Policy and Practice* (Podgorica: University of Montenegro, 2019).

⁵⁰⁶ E. Denisova-Schmidt, M. Huber, and E. Leontyeva, 'On the Development of Students' Attitudes Towards Corruption and Cheating in Russian Universities', *European Journal of Higher Education*, 6(2) (2016), 128-43.

university or faculty level is considered to have a positive impact on academic integrity.⁵⁰⁷ Moreover, the availability of financial resources determines the choice of academic integrity strategy.⁵⁰⁸

At UoM, human and financial organization was strategically planned and implemented. In addition to the integrity manager at the university level and the academic integrity officers at the faculty level, several other bodies were also in charge of promoting and maintaining academic integrity principles. The ethics committee (at the time of the certification process, it was called the Court of Honor) was the main body dealing with cases of unethical behavior. In addition, the board for quality assurance and a board for monitoring master's studies were also actively involved in various activities related to the promotion of academic honesty. The doctoral school and the editorial board also undertook important activities to prevent and detect plagiarism. The members of all boards received monthly compensation, which was budgeted, and funds allocated by the university. Thus, significant human and financial resources were engaged in raising awareness of the problem of academic dishonesty and its successful resolution.

3.4 Working group for academic integrity

Gallant and Drinan stressed that the creation of committees or working groups for academic integrity is an important tool for the adoption of best practices to promote academic integrity.⁵⁰⁹ Such working groups provide not only the necessary ethical infrastructure but also shared responsibility as they include all relevant members of the

⁵⁰⁷ Morris and Carroll, 'Developing a Sustainable'.

⁵⁰⁸ E. J. Holmes, 'Development and Leadership of a Faculty-led Academic Integrity Education Program at an Ontario College', *The Organizational Improvement Plan at Western University*, 22 (2017).

⁵⁰⁹ T. B. Gallant and P. Drinan, 'Organizational Theory and Student Cheating: Explanations, Responses and Strategies', *The Journal of Higher Education*, 77 (2006), 839-60.

academic community.⁵¹⁰ In addition, Kibler and others acknowledged the importance of an academic integrity officer who is responsible for monitoring relevant data, evaluating the effectiveness of policies and procedures, managing communication activities, and organizing training programs on academic integrity.⁵¹¹

At the beginning of the certification process, UoM appointed a working group that was in charge of monitoring all the activities and executing major tasks, such as the delivery of the Academic Integrity Charter. The working group created several policy documents and reports, such as *Academic Integrity at the University of Montenegro: Policy and Practice* and closely collaborated with the experts from IRAFPA and the CoE in designing a comprehensive plan to disseminate the culture of integrity at UoM. As key actors in the integrity building process, the members of the working group coordinated activities related to the promotion of academic integrity, collected information, and ensured the transparency and involvement of the entire academic community in the process.

3.5 Institutional policy

It is widely acknowledged that one of the most effective tools for combating academic dishonesty is an honor code.⁵¹² The rationale for this measure is that an honor code clearly defines what is expected of

⁵¹⁰ J. M. Stephens, 'Creating Cultures of Integrity: A Multi-Level Intervention Model for Promoting Academic Honesty', in *Handbook of Academic Integrity*, ed. by T. Bretag (Singapore: Springer, 2016), pp. 1-10.

⁵¹¹ Kibler and others, *Academic Integrity and Student Development*.

⁵¹² D. L. McCabe and L. K. Treviño, 'Cheating among Business Students: A Challenge for Business Leaders and Educators', *Journal of Management Education*, 19(2) (1995), 205-18; D. L. McCabe, L. K. Treviño, and K. D. Butterfield, 'Academic Integrity in Honor Code and Non-Honor Code Environments: A Qualitative Investigation', *The Journal of Higher Education*, 70(2) (1999), 211-34; L. Kidwell, 'Student Honor Codes as a Tool for Teaching Professional Ethics', *Journal of Business Ethics*, 29 (2001), 45-49.

students.⁵¹³ For instance, McCabe and Treviño compared two universities, one with and the other without an honor code, and concluded that significant differences existed between them regarding the rate of cheating.⁵¹⁴ In fact, they found that, while 54% of students had cheated at the university with an honor code, the percentage was considerably higher at the university without an honor code (71% of students).

Two main institutional policy documents that deal with academic integrity issues at UoM are the statute and the code of ethics. The code of ethics, adopted by the university senate, sets out the main values, professional standards, and ethical requirements at the university level. Responsibilities of academic and other staff and students are imposed by the ethics board, which also defines punishment for the violation of the ethical standards stipulated in the code of ethics. Additionally, the rules at all levels were adapted to precisely define what was expected of students in relation to academic behavior.

3.6 Internal and external communication

Effective communication plays an essential role in reducing the incidence of academic cheating.⁵¹⁵ Therefore, creating a clear, concise communication strategy has positive effects in reducing academic misconduct.⁵¹⁶ An effective system for communicating about integrity will generate more important information for the further improvement of

⁵¹³ D. L. McCabe and L. K. Treviño, 'Academic Dishonesty: Honor Codes and Other Contextual Influences', *The Journal of Higher Education*, 64(5) (1993), 522-38.

⁵¹⁴ McCabe and Treviño, 'Cheating among Business Students'.

⁵¹⁵ P. McGee, 'Supporting Academic Honesty in Online Courses', *The Journal of Educators Online*, 10(1) (2013), 1-31.

⁵¹⁶ P. Boehm, 'Promoting Academic Integrity in Institutions of Higher Education' (unpublished doctoral dissertation, Texas A&M University-Commerce, 2008).

academic conduct.⁵¹⁷ Aaron emphasized that a more extensive communication strategy will improve awareness of academic integrity issues in the larger community, which is crucial for improving academic honesty.⁵¹⁸

Recognizing the importance of effective internal and external communication in spreading the culture of transparency, accountability, and transparency, UoM made significant efforts to ensure consistent, timely, and reliable transfers of information between all the stakeholders involved in the process. Continuously informing its members and the public of all the activities undertaken in order to strengthen the culture of integrity, the university publicly committed itself to successful implementation of the certification process.

3.7 Control

An effective system of control is an important mechanism for preventing malpractice.⁵¹⁹ Kennedy and others also argue that establishing control systems sends a message to students that all misconduct will be discovered and punished.⁵²⁰ In the context of specific forms of academic dishonesty such as plagiarism, researchers consider that text-matching software such as *Turnitin* constitutes one of

⁵¹⁷ N. Granitz and D. Loewy, 'Applying Ethical Theories: Interpreting and Responding to Student Plagiarism', *Journal of Business Ethics*, 72(3) (2007), 293-306.

⁵¹⁸ R. M. Aaron, 'Student Academic Dishonesty. Are Collegiate Institutions Addressing the Issue?', *NASPA Journal*, 29 (1992), 107-13.

⁵¹⁹ C. A. Malgwi and C. C. Rakovski, 'Combating Academic Fraud: Are Students Reticent about Uncovering the Covert?', *Journal of Academic Ethics*, 7 (2009), 207-21.

⁵²⁰ P. Kennedy and others, 'Modeling Academic Dishonesty: The Role of Student Perceptions and Misconduct Type', *Journal of Economic Education*, 39(1) (2008), 4-21.

the most effective tools for controlling and combating plagiarism.⁵²¹ As discussed by Peković and others, text-matching software has two important roles in reducing the incidence of plagiarism.⁵²² The first is related to the learning process, while the second is associated with the fact that, when students are aware that their work will be checked by plagiarism detection software, they will make additional efforts to avoid plagiarism.

In April 2018, UoM obtained the text-matching software *iThenticate* through the Ministry of Education, in the framework of the project to support the development of higher education and research potential entitled *Enhancement of HE Research Potential Contributing to Further Growth of the WB Region*. Consequently, UoM adopted a standard regarding the decision to use *iThenticate* that indicates the bodies responsible for evaluation, the verification procedure, etc. In addition, all faculty units were taught how to acquire additional text-matching software in order to further boost the control process and prevent plagiarism.

3.8 Training of faculty and students

Educating both faculty members and students about academic integrity is essential for building an academic culture that is based on integrity.⁵²³ That is also one of the main conclusions derived from recent

⁵²¹ Z. Ercegovac and J. V. Richardson, 'Academic Dishonesty, Plagiarism Included, in the Digital Age: A Literature Review', *College and Research Libraries*, 65 (2004), 301-18; E. G. Bradley, 'Using Computer Simulations and Games to Prevent Student Plagiarism', *Journal of Education and Technology Systems*, 44(2) (2015), 240-52; G. J. Curtis and L. Vardanega, 'Is Plagiarism Changing over Time? A 10-Year Time-Lag Study with Three Points of Measurement', *Higher Education Research and Development*, 35(6) (2016), 1167-79; Peković and others, 'What Drives Students' Intention to Plagiarise'.

⁵²² Peković and others, 'What Drives Students' Intention to Plagiarise'.

⁵²³ K. O. Clifford, 'Academic Integrity and Campus Climate at Small Colleges', in *Academic Integrity Matters*, ed. by D. D. Burnett, L. Rudolph, and K.O.

wide-ranging research conducted in Montenegro.⁵²⁴ Training sessions, workshops, and seminars for academic staff that focus on academic integrity are identified as a mechanism that stimulates awareness and initiatives regarding academic integrity among faculty members and empowers them to transfer the knowledge to students.⁵²⁵ In the same vein, educating students through various activities about the university focus on academic integrity is essential to foster a culture of academic integrity.⁵²⁶

Considering that teaching students and staff the principles of academic integrity represents an important prerequisite for further improvement, UoM organized a number of workshops, seminars, and round tables for different stakeholders within the academic community. For instance, a two-day seminar entitled *Strengthening Integrity and Combating Corruption in Higher Education* was organized for academic integrity officers and representatives of the student parliament. Moreover, the center for quality assurance prepared presentations for students at all levels to give them a better understanding of academic integrity and improve their academic fundamentals in order to prevent plagiarism.

3.9 Commission for appeals and mediation

One of the mechanisms for boosting academic and ethical integrity is appointing an ethics committee.⁵²⁷ A committee that is in charge of handling complaints and defining disciplinary measures helps to reduce

Clifford (Washington DC: National Association of Student Personnel Administrators, 1998), pp. 109-33.

⁵²⁴ Vučković and others, 'Attitudes Towards Cheating'.

⁵²⁵ Boehm, 'Promoting Academic Integrity'.

⁵²⁶ Kibler and others, *Academic Integrity and Student Development*.

⁵²⁷ M. Kaiser, 'Practical Ethics in Search of a Toolbox: Discourse Ethics and Ethical Committees', *Global Bioethics*, 17(1) (2004), 137-48.

the probability of academic misconduct.⁵²⁸ The existence of an authority that determines sanctions for violations of academic integrity, examines cases of misconduct, and defines punishments is a strong signal that the academic fraud is considered unacceptable and may have important consequences, which in turn should deter students and staff from cheating.⁵²⁹

UoM established a precise structure and guidelines for processing integrity violations. Appeals concerning violations of the code of ethics are submitted to the ethics board, which constitutes the commission in charge of addressing a particular case. In cases of suspected plagiarism that may emerge during the obligatory verification of Master's and PhD theses, the center for quality assurance and the doctoral school organize meetings with the author and their mentor in order to examine the issue and suggest a solution.

3.10 Development of a list of sanctions

Cole and Kiss argued that it is essential to inform everyone about academic integrity problems.⁵³⁰ They cited the example of the University of California, Davis which, among other things, regularly publicizes descriptions of disciplinary cases that have been resolved. In the same vein, Kibler and others suggested that cases of sanctions and punishments should be presented in university publications in order to maximize the preventive effect of the resulting punishments.⁵³¹

The code of ethics at UoM defines sanctions for different types of violations and different members of the academic community (students, faculty). They are announced in the university newsletter and publicized on the university website. As indicated in the report, the ethics board

⁵²⁸ Boehm, 'Promoting Academic Integrity'.

⁵²⁹ Kaiser, 'Practical Ethics in Search of a Toolbox'; Gallant and Drinan, 'Organizational Theory'.

⁵³⁰ Cole and Kiss, 'What Can We Do'.

⁵³¹ Kibler and others, *Academic Integrity and Student Development*.

produces annual reports that may be submitted to the rector or senate. Furthermore, disciplinary measures for most potential breaches by students of university rules and regulations are also defined in the statute.

3.11 Internal evaluation system

An evaluation system to track progress is recognized as an important mechanism for sustaining the culture of academic integrity.⁵³² As Caldwell and Hansen point out, continuous evaluation of outcomes can generate an academic environment that sustains a culture of academic integrity.⁵³³

UoM precisely defined future activities in the area of the academic integrity. It indicated that the ethics board would adopt the modified code of ethics in accordance with the Law on Academic Integrity. The senate adopted the new code of ethics in September 2019. In addition, the report submitted by the working group on the certification process specified that UoM was planning to review the rules governing studies at the undergraduate, master's, and doctoral levels in order to further highlight the importance of academic integrity. Accordingly, new rules were adopted. As previously mentioned, UoM undertook to create an online tutorial for students to promote the culture of academic integrity. The course was designed with the support of the EU and CoE and launched in February 2020. Despite the situation due to the COVID-19 pandemic, UoM managed to organize several workshops on academic integrity throughout 2020.

⁵³² Weber, 'Implementing an Organizational Ethics Program'; S. F. Gambescia, 'BEST PRACTICES: A Best Practice Protocol for Handling Academic Honesty Issues with Adult Students', *The Journal of Continuing Higher Education*, 55(1) (2007), 47-55; C. Caldwell and M. Hansen, 'Trustworthiness, Governance, and Wealth Creation', *Journal of Business Ethics*, 97(2) (2010), 173-88.

⁵³³ Caldwell and Hansen, 'Trustworthiness'.

3.12 External evaluation system

The certification process was completed at the end of February 2019 when a team of independent experts visited the university to evaluate its level of preparedness for certification. During their visit, the experts had discussions with the working group, the rector and vice-rectors, representatives of the integrity and legal departments, instructors, deans, directors of institutes, and students at all levels.

The certificate was officially delivered to the university by IRAFPA experts at the fourth Forum of Rectors of Balkan Universities, which was organized by UoM, and then at the ceremony for the forty-fifth anniversary of the University of Montenegro.

4. Conclusion and discussion

The establishment of an institutional culture of integrity cannot be decreed; it takes several years. It would be naive to believe that the establishment of regulations, ethics committees, or software utilization change human behavior. Academic integrity certification is a multilayered process which requires significant institutional commitment, reorganization, control, and evaluation. And it is this commitment that makes it possible to ensure that integrity at the core of the university. The IRAFPA methodology adopted by the University of Montenegro can be described as a process that consists in several stages, which are distinct but complementary and which ensure the gradual adoption of the principles of integrity. Certification enabled the university to mobilize all the stakeholders involved in the process, and mobilization leads to buy-in to what they often found to be a vague concept: integrity. This concept of integrity motivated only a few players at the beginning but gradually took shape because the debate made it tangible.

Academic integrity is a very complex phenomenon that depends on many contextual factors. It is basically a question of ethics in higher

education, which is why HEIs from both developed and less developed countries face many challenges in this regard. Understanding academic integrity at any institution will initiate a comprehensive understanding of the whole society in which the HEI is deeply rooted. In the Montenegrin societal and cultural context, it is very important to mention that ethics is traditionally highly valued, but long-lasting, national and regional transitions since the 1990s have influenced many economic, social, and, therefore, educational transformations. Consequently, just a few years ago (in 2018) the leadership at the University of Montenegro started to engage with academic integrity more systematically, incorporating a holistic approach and an unconditional commitment to achieving high integrity standards.

This chapter has shown how structured, benevolent support from an external organization made it possible to proceed smoothly, in just two years, toward the lasting acceptance of a culture of integrity. This journey may be useful to other higher education institutions that also want to incorporate integrity principles and strive for certification, as it constitutes an academic ‘toolbox’ of principles, strategies, and steps in the certification process. In conclusion, while the challenges of the process of institutionalizing academic integrity principles and obtaining certification are usually common to most HEIs, the mechanisms, tools, and strategies for achieving these goals always depend on the local context. Thus, the UoM’s pathway toward certification clearly differs from the similar processes that took place or will take place in other countries and HEIs. But the goal is always the same: to establish a socially responsible university.

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Bibliography

- Aaron, R. M., ‘Student Academic Dishonesty. Are Collegiate Institutions Addressing the Issue?’, *NASPA Journal*, 29 (1992).
- Ahmadi, A., ‘Plagiarism in the Academic Context: A Study of Iranian EFL Learners’, *Research in Ethics*, 10 (2014).
- Ana, J., and others, ‘Research Misconduct in Low- and Middle-Income Countries’, *PLoS Medicine*, 10 (2013).
- Basso, S. K., ‘Experiences with and perceptions of academic dishonesty at Lehigh University: a plan to improve a campus culture that values integrity’. Conference paper. Political Science (2014).
- Belter, R. W., and A. du Pré, ‘A Strategy to Reduce Plagiarism in an Undergraduate Course’, *Teaching of Psychology*, 36 (2009).
- Bernardi, R. A., and others, ‘Examining the Decision Process of Students’ Cheating Behavior: An Empirical Study’, *Journal of Business Ethics*, 50 (2004).
- Boehm, P., ‘Promoting Academic Integrity in Institutions of Higher Education’ (unpublished doctoral dissertation, Texas A&M University-Commerce, 2008).
- Bradley, E. G., ‘Using Computer Simulations and Games to Prevent Student Plagiarism’, *Journal of Education and Technology Systems*, 44(2) (2015).
- Bretag, T., and S. Mahmud, ‘A Conceptual Framework for Implementing Exemplary Academic Integrity Policy in Australian Higher Education’, in *Handbook of Academic*

Integrity, ed. by T. Bretag (Singapore: Springer, 2016), pp. 463-80.

Caldwell, C., and M. Hansen, 'Trustworthiness, Governance, and Wealth Creation', *Journal of Business Ethics*, 97(2) (2010).

Carnero, A. M., and others, 'Plagiarism, Cheating and Research Integrity: Case Studies from a Masters Program in Peru', *Science and Engineering Ethics*, 23(4) (2017).

Clifford, K. O., 'Academic Integrity and Campus Climate at Small Colleges', in *Academic Integrity Matters*, ed. by D. D. Burnett, L. Rudolph, and K.O. Clifford (Washington DC: National Association of Student Personnel Administrators, 1998), pp. 109-33.

Cole, S., and E. Kiss, 'What Can We Do About Student Cheating?', *About Campus: Enriching the Student Learning Experience*, 5(2) (2000).

Council of Europe Platform on Ethics, Transparency and Integrity in Education (ETINED), *South-East European Project on Policies for Academic Integrity—Vol. 5* (Strasbourg: Council of Europe, 2018).

Curtis, G. J., and L. Vardanega, 'Is Plagiarism Changing over Time? A 10-Year Time-Lag Study with Three Points of Measurement', *Higher Education Research and Development*, 35(6) (2016).

Denisova-Schmidt, E., M. Huber, and E. Leontyeva, 'On the Development of Students' Attitudes Towards Corruption and Cheating in Russian Universities', *European Journal of Higher Education*, 6(2) (2016).

- Ercegovac, Z., and J. V. Richardson, 'Academic Dishonesty, Plagiarism Included, in the Digital Age: A Literature Review', *College and Research Libraries*, 65 (2004).
- Eury, J. L., and L. K. Treviño, 'Building a Culture of Honor and Integrity in a Business School', *Journal of Management Education*, 43(5) (2019), 484-508.
- Gallant, T. B., *Academic Integrity in the Twenty-First Century: A Teaching and Learning Imperative* (San Francisco: Jossey-Bass, 2008).
- Gallant, T. B., and P. Drinan, 'Organizational Theory and Student Cheating: Explanations, Responses and Strategies', *The Journal of Higher Education*, 77 (2006).
- Gallant, T. B., and P. Drinan, 'Toward a Model of Academic Integrity Institutionalization: Informing Practice in Postsecondary Education', *The Canadian Journal of Higher Education*, 38(2) (2008).
- Gambescia, S. F., 'BEST PRACTICES: A Best Practice Protocol for Handling Academic Honesty Issues with Adult Students', *The Journal of Continuing Higher Education*, 55(1) (2007).
- Granitz, N., and D. Loewy, 'Applying Ethical Theories: Interpreting and Responding to Student Plagiarism', *Journal of Business Ethics*, 72(3) (2007).
- Holmes, E. J., 'Development and Leadership of a Faculty-led Academic Integrity Education Program at an Ontario College', *The Organizational Improvement Plan at Western University*, 22 (2017).

- Ives, B., and others, 'Patterns and Predictors of Academic Dishonesty in Romanian University Students', *Higher Education*, 74(5) (2017).
- Jones, D. L. R., 'Academic Dishonesty: Are More Students Cheating?', *Business Communication Quarterly*, 74(2) (2011).
- Kaiser, M., 'Practical Ethics in Search of a Toolbox: Discourse Ethics and Ethical Committees', *Global Bioethics*, 17(1) (2004).
- Kennedy, P., and others, 'Modeling Academic Dishonesty: The Role of Student Perceptions and Misconduct Type', *Journal of Economic Education*, 39(1) (2008).
- Kibler, W. L., and others, *Academic Integrity and Student Development: Legal Issues and Policy Perspectives* (Asheville, NC: College Administration Publications, 1988).
- Kidwell, L., 'Student Honor Codes as a Tool for Teaching Professional Ethics', *Journal of Business Ethics*, 29 (2001).
- Lang, J. M., *Cheating Lessons: Learning from Academic Dishonesty* (Cambridge, MA: Harvard University Press, 2013).
- Mahabeer, P., and T. Pirtheepal, 'Assessment, Plagiarism and Its Effect on Academic Integrity: Experiences of Academics at a University in South Africa', *South African Journal of Science*, 115(11-12) (2019). <http://dx.doi.org/10.17159/sajs.2019/6323>.
- Malgwi, C. A., and C. C. Rakovski, 'Combating Academic Fraud: Are Students Reticent about Uncovering the Covert?', *Journal of Academic Ethics*, 7 (2009).
- Manatos, M. J., C. S. Sarrico, and M. J. Rosa, 'The European Standards and Guidelines for Internal Quality Assurance: An Integrative Approach to Quality Management in Higher Education?', *The TQM Journal*, 29(2) (2017).

- McCabe, D. L., K. D. Butterfield, and L. K. Treviño, *Cheating in College: Why Students Do It and What Educators Can Do about It* (Baltimore: Johns Hopkins University Press, 2012).
- McCabe, D. L., and L. K. Treviño, 'Academic Dishonesty: Honor Codes and Other Contextual Influences', *The Journal of Higher Education*, 64(5) (1993).
- McCabe, D. L., and L. K. Treviño, 'Cheating among Business Students: A Challenge for Business Leaders and Educators', *Journal of Management Education*, 19(2) (1995).
- McCabe, D. L., L. K. Treviño, and K. D. Butterfield, 'Academic Integrity in Honor Code and Non-Honor Code Environments: A Qualitative Investigation', *The Journal of Higher Education*, 70(2) (1999).
- McCabe, D. L., L. K. Treviño, and K. D. Butterfield, 'Honor Codes and Other Contextual Influences on Academic Integrity: A Replication and Extension of Modified Honor Code Settings', *Research in Higher Education*, 43 (2002).
- McGee, P., 'Supporting Academic Honesty in Online Courses', *The Journal of Educators Online*, 10(1) (2013).
- Mills, A., G. Durepos, and E. Wiebe, eds., *Encyclopedia of Case Study Research: Vol. I and II* (Thousand Oaks, CA: Sage, 2010).
<https://doi.org/10.4135/9781412957397>
- Morris, E. J., and J. Carroll, 'Developing a Sustainable Holistic Institutional Approach: Dealing with Realities "on the Ground" When Implementing an Academic Integrity Policy, in *Handbook of Academic Integrity*, ed. by T. Bretag (Singapore: Springer, 2016), pp. 449-62.

- Orr, J., Jr., 'Developing a Campus Academic Integrity Education Seminar', *Journal of Academic Ethics*, 16(3) (2018).
- Peković, S., 'The Determinants of ISO 9000 Certification: A Comparison of the Manufacturing and Service Sectors', *Journal of Economic Issues*, 44(4) (2010).
- Peković, S., and others, *Academic Integrity at the University of Montenegro: Policy and Practice* (Podgorica: University of Montenegro, 2019). <http://rewbc.ni.ac.rs/wp-content/uploads/2016/12/Academic-Integrity-Certification-University-of-Montenegro-January-2019.pdf>
- Peković, S., and others, 'What Drives Students' Intention to Plagiarise in Montenegro: The Moderating Role of text Matching Software', in *Integrity in Education for Future Happiness*, ed. by Z. R. Zhan, C. Hill, and C. Foltynek (Brno: Mendel University Press in Brno, 2020), pp. 127-54.
- Perović, Đ., and D. Vučković, 'Success in Studying at the University of Montenegro: Is There Hyper-Production of Diplomas?', *Interdisciplinary Description of Complex Systems*, 17 (2019).
- Stephens, J. M., 'Creating Cultures of Integrity: A Multi-Level Intervention Model for Promoting Academic Honesty', in *Handbook of Academic Integrity*, ed. by T. Bretag (Singapore: Springer, 2016), pp. 1-10.
- Sutherland-Smith, W., 'Retribution, Deterrence and Reform: The Dilemmas of Plagiarism Management in Universities', *Journal of Higher Education Policy and Management*, 32(1) (2010).
- Tauginienė, L., and others, *Glossary for Academic Integrity* (Brno: European Network for Academic Integrity (ENAI), 2018). <https://www.academicintegrity.eu/wp/glossary/>

- Tauginienė, L., and others, 'Enhancing the Taxonomies Relating to Academic Integrity and Misconduct', *Journal of Academic Ethics*, 17 (2019).
- Vučković, D., and others, 'Attitudes Towards Cheating Behavior During Assessing Students' Performance: Student and Teacher Perspectives', *International Journal for Educational Integrity*, 16 (2020). <https://doi.org/10.1007/s40979-020-00065-3>.
- Weber, J., 'Implementing an Organizational Ethics Program in an Academic Environment: The Challenges and Opportunities for the Duquesne University Schools of Business', *Journal of Business Ethics*, 65 (2006).

- Whitley, B., and P. Keith-Spiegel, 'Academic Integrity as an Institutional Issue', *Ethics and Behavior*, 11(3) (2001).
- Young, R. L., G. N. S. Miller, and C. L. Barnhardt, 'From Policies to Principles: The Effects of Campus Climate on Academic Integrity, a Mixed Methods Study', *Journal of Academic Ethics*, 16(1) (2018).