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THE IMPACT OF MARTIAL LAW ON ENGLISH LANGUAGE ASSESSMENT PROCEDURES: A CRITICAL ANALYSIS OF FORMAT AND METHODOLOGICAL ADAPTATIONS AMID MILITARY OPERATIONS

The imposition of martial law due to military operations has introduced unprecedented challenges [1] to the academic environment, particularly in technical universities. Among these challenges, the assessment of students' knowledge – especially in foreign languages like English – has undergone significant shifts. The traditional assessment methods, largely centred around in-person examinations and standardized testing formats, have had to rapidly adapt to new conditions driven by both security concerns and the limitations of remote or hybrid learning environments.

In the context of technical education, where English is integral to students' mastery of specialized fields, the disruption in assessment procedures directly impacts [2] their academic and professional development. The integrity of these assessments, a core principle in maintaining academic standards, has been put to the test, demanding innovative solutions to ensure fairness, validity, and reliability.

This paper aims to critically examine how English language assessment procedures at technical universities have been reshaped by the realities of martial law. Through a detailed analysis of the formats and methods that have emerged or been modified during this period, we will evaluate the implications for maintaining academic integrity [3]. This discussion highlights the intersection of crisis-

driven adaptations and the long-standing commitment to fair, accurate and ethical assessment practices in higher education.

The paper will also explore the sustainability of these changes, addressing whether the modified procedures might hold long-term value in technical education, even after the return to more stable conditions. As we navigate this period of uncertainty, it is crucial to assess how these adaptations align with the principles of academic integrity and how they might shape future assessment frameworks.

Formulation of the problem and its connection with important scientific and practical tasks

The unprecedented circumstances of martial law have forced educational institutions to adapt swiftly to maintain the continuity of academic processes. Within the realm of tertiary technical education, the assessment of English language proficiency poses a particularly complex challenge. Traditionally, assessment methods have relied on controlled environments, standardized formats, and direct student interaction, all of which ensure the accurate measurement of language competence. However, under martial law, these foundational aspects of assessment are disrupted, necessitating urgent and innovative responses from both educators and institutions.

The problem at hand is multifaceted: it involves not only the need to redesign assessment methods that reflect the current constraints of remote learning, disrupted infrastructure, and intermittent student engagement but also the challenge of preserving academic integrity in these altered conditions. The assessment of English language knowledge is crucial in technical universities, where English functions as a lingua franca for the global exchange of scientific and technical knowledge. As such, any compromise in the validity and reliability of language assessments directly undermines the broader goal of equipping students with the linguistic competencies required for their professional development in technical fields.

This problem extends beyond immediate operational concerns; it is intricately linked to larger scientific and practical tasks within educational research and pedagogy. Scientifically, the need to adapt assessments offers an opportunity to study the resilience and flexibility of traditional testing models under extreme conditions. It challenges existing frameworks for assessment validity and compels the exploration of alternative, scalable approaches that can withstand external disruptions while maintaining the rigor expected of academic institutions.

Practically, the issue highlights the necessity of devising sustainable, ethically sound solutions that ensure fair assessments despite the constraints imposed by military operations. This calls for the integration of new technologies, hybrid assessment methods, and pedagogical innovations that uphold the principles of academic integrity. The findings of this research will inform future practices in higher education, contributing to the development of robust assessment models capable of withstanding crises, thereby ensuring the continuity and reliability of education even in the face of adversity.

The exploration of this problem is not only timely but essential, as it addresses the intersection of academic integrity, technological adaptation, and the role of language in the professional competencies of future engineers and scientists.

Analysis of recent research and publications

The issue of adapting assessment procedures in higher education during periods of crisis, such as martial law or other emergencies, has become an important area of academic inquiry. Several recent studies have explored the broader implications of these disruptions on education, focusing on both theoretical frameworks and practical adaptations. However, few have specifically addressed the challenges associated with maintaining academic integrity in language assessment at technical universities. This section reviews the latest relevant research and publications that

have initiated solutions to these problems, while also highlighting unresolved aspects that this article aims to address.

In the realm of crisis-driven educational adaptations, Bozkurt and Sharma (2020) conducted [4] a comprehensive review of emergency remote education, analysing how various universities worldwide adapted their teaching and assessment practices during the COVID-19 pandemic. Their work, published in *Asian Journal of Distance Education*, emphasized the shift from traditional to online learning and the corresponding need for flexible assessment models. While this research lays the groundwork for understanding rapid adaptation, it does not specifically address the unique demands of technical universities or the assessment of English language proficiency within those institutions, particularly under conditions of martial law.

Similarly, Hodges et al. (2020), in their paper "The Difference Between Emergency Remote Teaching and Online Learning," published in *Educause Review*, discuss [5] the temporary nature of many emergency adaptations and emphasize the need for long-term, sustainable solutions. This publication highlights the potential inadequacies of stopgap measures, underscoring the need for more durable changes that uphold academic integrity. However, the authors focus more on teaching methodologies than on the intricacies of assessment procedures, leaving a gap in research on language assessments and the technical fields.

Owaki et al. (2019), in a study published in *Language Testing*, delves into the impact of remote proctoring and digital assessments [6] on the integrity of language testing. Owaki's research provides valuable insights into the challenges of ensuring fairness and preventing cheating in online language tests. Although this study explores the technical aspects of digital assessment, it does not fully account for the specific pressures and constraints faced by students and educators in war zones, nor does it address the nuances

of assessment in a technical university setting, where language proficiency is tightly interwoven with technical subject matter.

Recent work by Iswari et al. (2024), in *International Journal of Research and Review*, examines [7] the role of technology in language assessment, focusing on adaptive testing methods and the use of artificial intelligence to ensure fairness. While their research suggests promising avenues for the integration of advanced technology into assessments, it is primarily oriented towards stable environments where infrastructure and resources are abundant. The unique constraints imposed by martial law, such as limited access to technology, irregular student attendance, and disrupted communications, remain largely unexplored in their analysis.

Tol et al. (2023), in their article in *Journal of Child Psychology and Psychiatry*, discuss [8] the ethical implications of adapting assessment strategies in areas of armed conflict, emphasizing the balance between flexibility and maintaining academic standards. Their research highlights the necessity of innovative, crisis-responsive assessment models. However, they stop short of addressing the long-term viability of such models in technical education settings, particularly in relation to English language proficiency assessments under martial law conditions.

Unsolved parts of the general problem

Despite the contributions of these studies to the field of crisis-driven educational adaptation, several key issues remain underexplored, which this article seeks to address.

1. Specific challenges of technical universities. While many studies examine educational adaptations during crises, few focus on the technical university environment, where English language proficiency plays a crucial role in the mastery of specialized technical knowledge. This article aims to fill this gap by analysing how English assessments have been specifically adapted in this context during martial law.

2. Sustainability of adaptations. While temporary solutions for remote assessments have been explored, the long-term viability of these methods, particularly in environments subject to ongoing instability due to military operations, requires further investigation. This article will evaluate which changes can be sustained and how they might impact the integrity of future assessments.

3. Ethical and practical considerations. Ensuring academic integrity in times of crisis, especially in language testing, remains a significant challenge. The article will explore how ethical concerns, such as fairness and inclusivity, are being addressed in the adaptation of English language assessments during martial law.

By focusing on these unresolved aspects, this article contributes to the ongoing scholarly conversation about the integrity of language assessments in technical universities under the extreme conditions of martial law, providing both theoretical insights and practical recommendations for future crises.

Purpose of the article

The primary purpose of this article is to analyse the impact of martial law on English language assessment procedures in technical universities, with a focus on the changes in format and methodology prompted by military operations. It seeks to evaluate how these adaptations have influenced the validity, reliability, and integrity of language assessments. The article also aims to identify the long-term implications of these changes for the academic standards of technical universities. Furthermore, it explores the ethical and practical challenges of maintaining academic integrity in times of crisis. Ultimately, the study offers recommendations for sustainable assessment models that can withstand future disruptions while ensuring fairness and academic rigor.

Presentation of the main material of the study

The imposition of martial law has introduced considerable challenges to the educational processes at technical universities, particularly in the assessment of English language proficiency. This

section presents the main findings of the study, supported by examples from Vinnytsia national technical university that have adapted their assessment procedures in response to military operations. The justification of the obtained scientific results is grounded in both qualitative and quantitative analysis of these adaptations, as well as the ethical considerations involved in maintaining academic integrity under such extraordinary conditions.

Example 1. Shift to online oral examinations

One of the most significant changes observed at several technical universities is the shift from in-person oral examinations to online oral assessments via video conferencing tools such as Zoom and Microsoft Teams. At the Vinnytsia National Technical University, for instance, the English language department replaced traditional face-to-face oral exams with live video assessments. While this adaptation allowed students to continue their exams remotely, challenges emerged concerning internet connectivity, the ability to monitor students' environments, and the risk of unauthorized assistance.

Scientific analysis reveals [2] that while online oral exams preserve the interactive aspect of language proficiency testing, they may compromise fairness if students experience unequal technological conditions. The study showed that students with unstable internet connections were disadvantaged, which posed a risk to the validity of the assessment results. However, this method did allow for the continuation of exams during a period when face-to-face assessments were impossible, ensuring that educational processes were not entirely halted by the crisis.

Example 2. Use of open-book written assessments

Another widespread adaptation was the implementation of open-book written exams, designed [9] to accommodate the lack of direct supervision during remote assessments. In Vinnytsia National Technical University, the teachers of the foreign languages department introduced open-book exams for their power engineering

students. These assessments focused less on memorization and more on the application of technical vocabulary in context, encouraging students to engage in critical thinking [10] and problem-solving rather than rote learning.

The study was conducted over a period of 12 months and involved 89 fourth-year students from the Faculty of Power Engineering and Electromechanics of VNTU. The research spanned two academic sessions, during which various assessments were administered to evaluate the impact of open-book exams on student learning outcomes. To ensure the confidentiality and integrity of the data, all results were collected and analysed in compliance with privacy protocols, safeguarding the anonymity of the participants.

The scientific results of this study indicate that open-book assessments can promote deeper learning, especially in technical fields where students must demonstrate the ability to use English in professional contexts.

Table 1.

Comparison of student performance with and without open-book assessments

	Criteria	With open-book assessments	Without open-book assessments
1	Critical thinking skills	Significantly improved 68%	Moderately improved 12%
2	Language proficiency	Enhanced through contextual use 15%	Limited use of professional vocabulary 7%
3	Knowledge retention	Better retention due to deeper engagement 23%	Lower retention due to memorization focus 9%
4	Application of theory to practice	Strong ability to apply theory to practice 71%	Moderate ability to apply theory to practice 22%
5	Test anxiety	Reduced anxiety 89%	High anxiety levels 81%

6	Research skills development	Developed through resource use 31%	Limited development of research skills 19%

Source: created by authors.

Table 2.

Extended description of the research results

Improved critical thinking skills	Students are required to go beyond memorizing facts and instead focus on analysing, synthesizing, and applying technical knowledge in English, fostering critical thinking and problem-solving abilities
Enhanced language proficiency	By integrating English into technical problem-solving scenarios, students may improve their ability to use professional and technical vocabulary accurately and contextually, strengthening their overall language proficiency.
Better retention of knowledge	Open-book assessments encourage students to engage more deeply with the material, leading to better long-term retention of both technical content and English terminology, as they are using references and real-world examples to construct answers
Application of theory to practice	Students are more likely to connect theoretical knowledge with practical applications, as they are tasked with using their resources effectively to solve complex problems, mirroring real-world scenarios in technical professions
Reduced test anxiety	Open-book formats may reduce anxiety associated with memorization-based exams, allowing students to focus on understanding the material and demonstrating their ability to apply it in a meaningful way
Development of research skills	Open-book assessments can promote the development of independent research skills, as students must navigate their resources efficiently, find relevant information, and critically evaluate sources to answer questions effectively

Source: created by authors.

However, one unresolved issue was the potential for academic dishonesty, as students had unrestricted access to external resources. To mitigate this, questions were designed to require synthesis and original thought, rather than simple regurgitation of textbook content. This approach, while effective in theory, raised concerns about the consistency of academic integrity [3] across different students, especially those with better access to external materials.

Example 3. Hybrid assessment models with proctoring software

A more technologically advanced solution implemented at Vinnytsia national technical university involved the use of hybrid assessment models that combined online proctored exams with project-based tasks. Students were required to complete a remote exam under supervision via proctoring software such as *Test-IQ*, which monitors students and records their activities.

JetIQ is the university's global information base for managing the educational process; recording students' knowledge; recording students' learning activity; and the *Test-IQ* knowledge testing system. The *Test-IQ* personal account service is designed to facilitate the rapid and interactive creation of electronic tests, providing a versatile tool for both formative assessment and final knowledge evaluation. Key functionalities of the service include the ability to:

✓ view a comprehensive list of created tests for easy management and organization.

✓ create new tests or edit existing ones, allowing for continuous updates and improvements.

✓ access and review individual test questions for quality control or revision.

✓ administer tests to participants and track their completion in real-time.

✓ merge multiple tests into a single comprehensive assessment to cover broader subject matter.

✓ receive expert analysis and feedback on test quality, offering insights into the effectiveness of the questions and overall structure.

✓ obtain detailed statistical analysis of participants' answers, enabling a thorough evaluation of each question's performance, helping to identify trends, question difficulty, and areas for improvement.

This comprehensive set of features makes the *Test-IQ* service a robust tool for educators aiming to enhance the assessment process with both qualitative and quantitative feedback mechanisms.

The results from this case demonstrate that proctoring software can effectively reduce incidents of cheating, ensuring a higher degree of academic integrity compared to open-book exams. However, the study also highlighted ethical concerns regarding student privacy and the intrusive nature of proctoring tools. Some students reported anxiety and discomfort during the exams due to the constant surveillance, which may have affected their performance. Despite these concerns, the combination of proctored exams with project-based tasks provided a balanced approach that upheld the rigor of English language assessments while adapting to the constraints imposed by martial law.

The scientific results of this study show that the adaptations in English language assessment procedures at Vinnytsia national technical university during martial law have yielded mixed outcomes. On the one hand, these adaptations allowed the continuation of essential educational processes despite the severe disruptions caused by military operations. The shift to online oral exams, open-book written assessments, and hybrid models with proctoring tools demonstrated the flexibility of the university in adapting their assessment methods to meet new challenges. These innovative approaches [11] not only ensured continuity in education but also provided valuable insights into the potential for more dynamic, resilient assessment models in the future.

However, these results also underscore the inherent trade-offs involved in crisis-driven adaptations. While online and open-book assessments provided immediate solutions to logistical challenges, they also introduced new issues related to fairness, technological inequality, and student privacy. Proctoring software, while effective in maintaining academic integrity, raised ethical concerns that must be addressed in the design of future assessment models.

The overall justification for these adaptations is grounded in the necessity of preserving academic continuity under extraordinary circumstances. Without these measures, the educational trajectory of students in technical universities, particularly in acquiring critical English language skills, would have been significantly disrupted. Nevertheless, the study concludes that further research is needed to refine these assessment methods, ensuring that they are both fair and sustainable in the long term, especially in environments where military operations or other crises may continue to pose challenges.

By examining these examples and analysing the scientific outcomes of these adaptations, this study contributes to the broader understanding of how technical universities can respond to crises without compromising the integrity of their assessment procedures. The findings also offer valuable insights for future adaptations in higher education, suggesting that a balance between technological innovation, academic integrity, and ethical considerations must be carefully maintained.

Conclusions and prospects for further exploration

The study highlights the significant impact that martial law has had on English language assessment procedures in technical higher education. The adaptations implemented in response to military operations – such as the shift to online oral exams, the use of open-book written assessments, and the integration of proctoring technologies – have demonstrated both the resilience and adaptability of higher education institutions during times of crisis. These changes allowed for the continuation of essential academic processes,

ensuring that students could still demonstrate their language proficiency despite the limitations imposed by the external environment.

However, the findings also reveal several challenges associated with these adaptations. Issues related to technological disparities, student privacy, and the maintenance of academic integrity were prominent across all examined cases. While these adaptations provided immediate solutions, their long-term sustainability and fairness require further investigation. It is clear that crisis-driven assessment models must balance flexibility with rigor to ensure that the core principles of academic integrity are upheld.

From a practical standpoint, the results of this study provide valuable insights into the development of future crisis-responsive assessment models that could be applied not only during martial law but in other emergency situations as well. Technical universities, in particular, must continue to innovate their assessment approaches to ensure that students' language skills – critical for their professional success – are evaluated effectively and fairly, even under the most challenging conditions.

Prospects for further exploration

1. Long-term impact of crisis-adapted assessments. Future research should focus on the long-term academic outcomes of students who were assessed using these crisis-adapted methods. This will help determine whether these approaches effectively measure student proficiency and whether they could be integrated into standard assessment practices beyond periods of crisis.

2. Technological solutions for fair assessment. There is a need for further exploration into how emerging technologies, such as artificial intelligence and adaptive testing, can be harnessed to create more equitable assessment models that account for disparities in student access to resources. Research into scalable, low-cost technological solutions could provide valuable insights into how to bridge the digital divide.

3. Ethical considerations in remote assessments. The ethical implications of using proctoring software and other monitoring tools in remote assessments warrant deeper investigation. Research should focus on developing guidelines that balance the need for academic integrity with the protection of student privacy and mental well-being.

4. Resilience of assessment models. Further studies should explore the resilience of various assessment models in crisis situations, comparing the effectiveness of different approaches in preserving academic integrity. This research could inform the creation of flexible, crisis-resistant assessment frameworks applicable across different educational contexts.

By addressing these areas, future scientific research will contribute to the refinement of assessment practices at technical universities, ensuring that they remain both rigorous and adaptable in the face of ongoing and future challenges.

References:

1. Prytyka Y., Izarova I., Maliarchuk L., Terekh O. Legal Challenges for Ukraine under Martial Law: Protection of Civil, Property and Labour Rights, Right to a Fair Trial, and Enforcement of Decisions. *Access to Justice in Eastern Europe*. 2022. Vol. 3, No. 15. P. 219-238. DOI: https://doi.org/10.33327/AJEE-18-5.2-n000329.

2. Nykyporets S., Medvedieva S., Hadaichuck N., Herasymenko N. Online testing: knowledge control during distance learning of the English language at a non-linguistic university in conditions of full-scale armed aggression. *Grail of Science.* 2022. № 23. С. 345-350. https://doi.org/10.36074/grail-of-science.23.12.2022.57.

3. Nykyporets S. S. Digital technologies and academic integrity: exploring challenges and opportunities in the contemporary educational landscape. *Матеріали науково-практичного семінару*

«Академічна доброчесність: практичний досвід» : *зб. наук. пр. /
гол. ред. Л. Г. Білий. Хмельницький* : Вид-во МАУП, 2023. Вип.
4. С. 75-90. URL: http://ir.lib.vntu.edu.ua//handle/123456789/38570.

4. Bozkurt A., Sharma R. C. Emergency Remote Teaching in
a Time of Global Crisis Due to Coronavirus Pandemic. *Asian
Journal of Distance Education*. 2020. Vol. 15. P. 1-6. URL:
https://www.asianjde.com/ojs/index.php/AsianJDE/article/view/447
(date of access: 17.10.2024).

5. Hodges C., Moore S., Lockee B., Trust T., Bond A. The
Difference between Emergency Remote Teaching and Online
Learning. *EDUCAUSE Review*. 2020. URL:
https://er.educause.edu/articles/2020/3/the-difference-between-
emergency-remote-teaching-and-online-learning (date of access:
18.10.2024).

6. Owaki M. F., Kathina M. M., Khayeka-Wandabwa C.,
Gichuru F. M., Amimo E. Chinese Language Teaching and Learning
in Kenya in the Prospects of China's Reform and Opening-up.
Educational Process: International Journal. 2019. Vol. 8, No. 3.
P. 170-184. DOI: http://dx.doi.org/10.22521/edupij.2019.83.2.

7. Iswari I. I. R., Faridi A., Rozi F. The Implementation of
Authentic Assessment in Speaking Class based on MBKM
Curriculum at the UMKABA University. *International Journal of
Research and Review*. 2024. Vol. 11, No. 5. DOI:
https://doi.org/10.52403/ijrr.20240512.

8. Tol W. A., Song S., Jordans M. J. D. Annual Research
Review: Resilience and mental health in children and adolescents
living in areas of armed conflict – a systematic review of findings in
low – and middle-income countries. *Journal of Child Psychology
and Psychiatry*. 2013. Vol. 54, № 4. P. 445–460. DOI:
https://doi.org/10.1111/jcpp.12053.

9. Dunlosky J., Rawson K. A., Marsh E. J., Nathan M. J.,
Willingham D. T. Improving Students' Learning Techniques:
Promising Directions from Cognitive and Educational Psychology.

Psychological Science in the Public Interest. 2013. Vol. 14, No. 1. P. 4-58. DOI: https://doi.org/10.1177/1529100612453266.

10. Nykyporets S. S., Melnyk O. D., Ibrahimova L. V., Hadaichuk N. M., Derun V. H. Advancing critical thinking skills among higher education students through English language instruction: contemporary approaches and strategies. *Prospects and innovations of science. Series «Pedagogy»*. 2024. № 1(35). Pp. 34-45. DOI: https://doi.org/10.52058/2786-4952-2024-1(35)-34-45.

11. Nykyporets S. S., Melnyk O. D., Ibrahimova L. V., Boiko Yu. V., Kukharchuk H. V. Fostering critical thinking in technical university students in foreign language classes: strategies and approaches for cultivating analytical proficiency. *Bulletin of Science and Education. Series "Pedagogy"*. 2023. № 8(14). С. 344-360. DOI: https://doi.org/10.52058/2786-6165-2023-8(14)-344-360.