"Taras Shevchenko National University of Kyiv: Navigating education as a frontline during times of war"

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SPECIAL ISSUE: ACADEMIC MANAGEMENT IN THE CONDITIONS OF WAR

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TARAS SHEVCHENKO NATIONAL UNIVERSITY OF KYIV: NAVIGATING EDUCATION AS A FRONTLINE DURING TIMES OF WAR

Abstract

This study aims to highlight the resilience and innovation of Taras Shevchenko National University of Kyiv (KNU) in the face of internal and external risks, particularly during times of war and political instability. KNU's commitment to advancing knowledge is evident through its successful maintenance of educational, scientific, and economic activities and its proactive measures to counter propaganda and misinformation. The university has prioritized the psychological and emotional support of its students and staff and has minimized student losses by implementing flexible forms of education and individual counseling. KNU has also strengthened its international partnerships and grant initiatives. Despite significant losses, the university has maintained its material and technical infrastructure by leveraging various funding sources and developing a strategic trajectory toward an entrepreneurial model. KNU's strategic objectives include transforming the university into the core of innovation clusters, establishing a risk management system, and monitoring the labor market. KNU's experience could provide valuable insights for other universities facing similar challenges, emphasizing the importance of effective risk management, crisis communication, and psychological support for the academic community.

Keywords education, higher education institutions, crisis management, entrepreneurial university, war, Ukraine

JEL Classification I23, H12, H56, L26

INTRODUCTION

On February 24, 2022, the russian invasion of Ukraine began with the aggressor's use of bombs, tanks, and shells, leading to extensive destruction and loss of life. Multiple cities, including Hostomel, Okhtyrka, Kharkiv, Chernihiv, Mariupol, and Melitopol, were targeted by enemy fire, while Bucha and Irpin, located a mere twenty minutes from the Ukrainian capital of Kyiv, were seized by the invaders, resulting in civilian casualties and rampant looting. This event marked a defining moment in Ukrainian history, dividing the nation's collective memory into "before" and "after" the invasion. The hearts of Ukrainians ceased to beat as individual entities, merging into a unified, resilient heart that symbolizes Ukraine's enduring spirit.

The education sector was impacted profoundly, with many higher education institutions (HEIs) forced to operate as "universities without walls" (Lopatina et al., 2023), with some located in occupation zones and others losing a substantial portion of their buildings (UI, n.d.). These developments have particularly affected the Kyiv region and the

Ukrainian capital. Despite the enemy's hopes, Ukrainians did not welcome the invaders with flowers. Instead, they rallied at Halytska (previously Victory) Square in Kyiv, received weapons, and created territorial defense units. An active information war and a counter-propaganda campaign on social media also began.

Taras Shevchenko National University of Kyiv (KNU), much like the Ukrainian population, was deeply affected by the aggression. However, the university community remained stable and organized despite the shock and outrage. KNU faced the daunting task of identifying the most effective principles and methods of management to ensure the safety of its personnel and students, preserve intellectual and material resources, identify pathways for recovery and development, and contribute to the defense capabilities of the state for an inevitable victory.

This study aims to present KNU's experience in maintaining its educational, scientific, and economic activities, exploring new development opportunities, and demonstrating its capacity to promptly assess external and internal risks. In addition, the paper seeks to shed light on KNU's active role in promoting counter-propaganda and informative campaigns that foster resilience and patriotism within the university community, as well as its initiatives in providing psychological and emotional support to students and staff.

1. RESULTS

1.1. KNU as a leader of Ukraine's education system

KNU is a classical academic institution focusing on research, bearing the name Taras Shevchenko, the renowned Ukrainian poet, prose writer, thinker, painter, engraver, ethnographer, public figure, national hero, and symbol of Ukraine. Its origins can be traced back to 1834, when it was established as St. Volodymyr's University, initially offering courses in philosophy, following the tradition of most European universities (TSNUK, n.d.). Subsequently, the university expanded to include faculties of law and medicine and was accommodated in a new building, famously referred to as the Red Building (Chervonyi Korpus in Ukrainian). The Red Building, located in the historic district of Kyiv, was designed by the distinguished Italian architect Vincenzo Beretti (Patryliak, 2019). This iconic structure is vital to Ukraine's cultural heritage and a symbol of fundamental higher education (TSNUK, 2022a).

Presently, KNU boasts an extensive academic and research network encompassing 13 faculties, eight educational and research institutes, three training institutes, two colleges, a lyceum, the Institute of Psychiatry, the Astronomical Observatory, the Botanical Garden, and the Kaniv Nature Reserve. The university's academic offerings include 146 bach-

elor's, 217 master's, and 45 Ph.D. programs. As of February 24, 2022, the university had an estimated total student population of 30.5 thousand individuals, with over 1,000 pursuing doctoral studies. KNU's workforce comprises around 7,000 staff members, of which 2,880 are dedicated educators. Notably, 60% of the teaching staff hold academic ranks of full and associate professors (TSNUK, 2022b, 2023a).

KNU's performance in national rankings reflects Ukraine's leading HEI status. The university was ranked first in the TOP-200 Ukraine 2022 University Rating by Euroosvita (2022). In addition, KNU has gained international recognition through its inclusion in several global rankings. For instance, KNU attained the top position in the institutional rating of publication activity by Springer Nature (2022). It was ranked 651-700 in the QS World University Rankings and scored 320 in the Reputation among Employers indicator (QS, 2022). According to the Times Higher Education World University Rankings (2022), KNU was placed within the 1201-1500 universities group. In the U.S. News (n.d.) Global Universities in Europe regional ranking, KNU was ranked 464. The relatively low rankings of KNU in global ratings can be attributed to the evaluation criteria specificity, where scientific research comprises over 60%. It is worth noting that Ukrainian HEIs have traditionally focused more on teaching than research until recently.

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1.2. First-priority management actions during the outbreak of war

On February 24, 2022, the start of the full-scale russian invasion of Ukraine shook the entire nation. KNU faced significant challenges in ensuring the safety of its personnel and students, safeguarding its material and technical resources, and sustaining its educational, scientific, and economic activities. Yet, despite the initial shock, the university demonstrated resilience and the ability to make effective managerial decisions to cope with the crisis. In less than a day, KNU's higher and line management recognized the need to transition to a new governance model under martial law and quickly began implementing it. The university staff rallied around the slogan: "Education is a battlefront without shots fired, but requires extraordinary efforts and boundless responsibility."

The initial focus was on orchestrating the prompt and proactive evacuation of some of the university's faculty, students, and staff to safer locales. This process was swiftly transformed into a meticulously organized and systematic endeavor within days. Relevant information regarding the impacted individuals and their relocation needs was collected and updated regularly. In addition, KNU formed expert groups to analyze external and internal factors affecting the university to predict the confrontation's timing and identify existing reserves. The war has significantly damaged strategic enterprises and infrastructure, resulting in reduced living standards, decreased funding for education, and severe degradation of the environment. That encouraged other countries to provide military, financial, humanitarian, and psychological assistance and preferential conditions for displaced persons (Table A1, Appendix A).

The educational process underwent a significant reorganization. An inquiry was conducted on March 23-31, 2022, to determine the possibility and desire to continue education after the invasion. Results from the investigation, which involved 50.7% of students, indicated that 99.6% of respondents intended to continue their studies. Starting on April 4, 2022, KNU resumed its classes and work routine schedule, despite the ongoing war. The university consequently implemented a

shift to online learning, despite constant air attacks, frequent power outages, heat shortages, and limited internet access. Special conditions were introduced for graduates' final certification events, and requirements for their thesis were revised to consider the specialties' specificity and comply with applicable standards. Individual schedules were also introduced for participants involved in military operations. While KNU's educational activities largely followed previously approved plans, many examples exist of student soldiers receiving consultations from educators, corresponding with them, successfully passing exams, and completing written assignments in trenches or occupied territories.

Ukraine's energy infrastructure, including Zaporizhzhia nuclear power plant, Kakhovska hydroelectric power station, and several thermal power plants in various cities such as Kyiv, Kharkiv, Sumy, Chernihiv, and Mariupol, faced severe damage and destruction. The resulting blackouts lasted for several days and were later regulated to a precise four-hour schedule as power engineers tirelessly worked to restore objects. Despite these challenges, the educational process continued with alternative energy sources such as solar batteries, generators, power banks, and battery-powered lights, which were utilized by professors and students alike. An asynchronous learning format was implemented, allowing students who could not attend due to air attacks or other reasons to access educational materials and interact with their teachers asynchronously. Additionally, teachers established a system of individual student counseling in response to the difficulties arising from the invasion. As evidenced by the summer semester of the 2021-2022 academic year results, academic performance did not deteriorate but improved, especially at the master's level. KNU students embraced the motto: "I study for myself and for the guy who fights for me."

KNU continued to operate and actively contributed to strengthening the defense capabilities of the capital and surrounding areas. During this time, KNU served as a refuge for various units of the Armed Forces, Special Forces, State Border Guard Service, and Defense Intelligence of Ukraine, who used the campus to carry out their tasks. In addition, the university provided meals to military

institute cadets and officers involved in the airport defense in Zhuliany and later the city of Kyiv from February to March 2022. Notably, over 100 university employees entered the Armed Forces of Ukraine and the territorial defense units.

1.3. University destruction and recovery during the war

When examining the current destruction caused by war, the mind is drawn to historical events during the Kyiv occupation from 1941–1943. During this period, the National Socialist Kyiv University operated within the walls of the KNU's Red Building. The fascist troops used the university's courtyard for drill training, and in November 1943, the Red Building was burned by retreating Nazi troops. Five explosions and fires destroyed 70% of the university building (Duhnovski, 2020).

Unfortunately, the situation is not much different, with hospitals, maternity hospitals, residential buildings, schools, and universities being bombed in a European country. KNU has not been immune to such destruction. For instance, on March 1, 2022, rocket attacks caused damage to the Institute of International Relations, the Institute of Journalism, and the Educational and Research Institute of Public Administration and Civil Service. Rocket attacks on March 16, 2022, also damaged the Faculty of Information Technology. The situation worsened on October 10, 2022, when a massive missile strike hit KNU, destroying the Institute of Philology, the Scientific Library, the Faculty of Chemistry building, the Botanical Faculty's greenhouses, and the Red Building itself (TSNUK, 2022). The Scientific Library, included in the State Register of Scientific Objects of National Heritage of Ukraine, was particularly hard hit, with significant damage to the rooms housing old, rare, and valuable book collections (TSNUK, 2022c).

On the new year night of December 31, 2022, Ukraine experienced a massive attack from russia involving cruise missiles and kamikaze drones. The attack inflicted extensive damage to KNU, including the exhibition campus and the Institute of Biology and Medicine, which suffered significant destruction. Furthermore, the vivarium, a facility used to house and breed laboratory animals, was

damaged and left without windows. Additionally, priceless stained glass windows, considered a unique object of Ukrainian art, were destroyed. The attack also targeted several faculties, departments, and complexes within the university, including the Institute of High Technologies, the faculties of psychology, sociology, computer science and cybernetics, radio physics, electronics and computer systems, the mechanical-mathematical and geographical faculties, the laboratory building, and the nuclear physics department. In addition, the cryogenic complex, sports complex, physics and mathematics lyceum, and some students' dormitories also suffered damage (TSNUK, 2023b). As of March 2023, the university had suffered losses of more than UAH 145 million (EUR 3.6 million) during the full-scale invasion.

The restoration of KNU's infrastructure began a few months after the devastating attack. The reconstruction efforts involved collective actions from various stakeholders, including students, staff, graduates, the state, domestic and foreign partners, and individuals who were invested in the future of Ukrainian education. The restoration process commenced in October-November 2022 and saw the Scientific Library staff working tirelessly to address the attack's aftermath. Specifically, they moved around 17,000 storage units from the rare books and manuscripts department to secure premises within the library. An information campaign was also launched to raise funds to reconstruct the damaged buildings (Interfax Ukraine, 2023). Cabinet of Ministers of Ukraine (The Verkhovna Rada of Ukraine, 2022) allocated UAH 15 million (EUR 375,000) from the reserve fund to restore the damaged objects of KNU to eliminate the consequences of the rocket attacks on Kyiv (TSNUK, 2023a).

1.4. Balancing personnel resources during times of war

KNU has declared the preservation of personnel potential a strategic priority task, in line with the findings of an expert survey conducted in April-May 2022 by the Ukrainian Union of Marketing Experts (2023) among the 20 biggest HEIs in Ukraine. As of 2022, the number of full-time faculty stands at 2,648, only six less than in the previous year, and has remained relatively stable

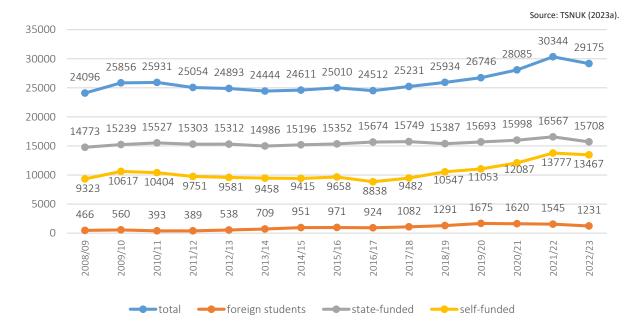


Figure 1. Dynamics of changes in the number of undergraduate and graduate students from 2008 to 2022

during the year of the war. This has been possible due to the motivational shift towards moral incentives rather than material ones, as departments independently decided not to dismiss any educator even under conditions of reduced state funding by reducing salaries to 75-80%. The main objective became victory over the enemy on mutual aid and justice principles. The effective admission campaign allowed half of the faculty to return to full-time work while the other 50% remained part-time as of December 1, 2022.

In 2022, the ongoing military conflict and the resulting threats to human life and health indirectly motivated the university staff to enhance their qualifications and pursue scientific research opportunities outside of Ukraine. The university recorded 167 long-term foreign business trips (over one month), and 443 employees voluntarily took unpaid leaves. These circumstances increased the workload for other KNU employees, leading departments to seek additional ways to fulfill their functional duties with existing staff. The shift to remote work and personnel management procedures also presented challenges for the university. Nevertheless, it is noteworthy that despite the difficult circumstances, the academic staff published more research papers and secured more grants to meet the demands of the educational and scientific processes.

1.5. Challenges in preserving KNU students during conflict and migration

Following the full-scale invasion and the subsequent occupation of the southern and eastern regions of Ukraine, the escalation of military operations along the front line resulted in the migration of the population from high-risk areas toward the country's interior and other countries. This situation led to declining bachelor's and master's degree students. Moreover, the departure of young people seeking temporary refuge in safe European and other countries resulted in fewer school graduates aiming to enter Ukrainian HEIs under challenging circumstances. However, since the beginning of the admissions period, KNU has received a high volume of applications, indicating that the university will continue to function despite these challenges. Therefore, although the total number of students in KNU decreased by 4% in 2022 compared to 2021, with 27% being self-funded and others supported by the government, the university remains committed to maintaining the positive trend of recent years regarding the total number of students (Figure 1).

KNU has undertaken several specific measures to strengthen its international image and contribute to the successful work of its compatriots abroad. The university has concluded several international agreements and memoranda, including its membership in the Alliance of European Universities EUniWell, which provides opportunities for project activities and the best European practices in academic mobility. Moreover, the university has established 31 partnership agreements with HEIs from 22 countries worldwide and 13 double-degree master's and Ph.D. programs. It has also collaborated with international organizations, foundations, and embassies from five countries and renewed partnerships with HEIs from eight other countries. Additionally, KNU has presented its R&D results in the world's largest international technology transfer network, Enterprise Europe Network, which has united over 2.5 million enterprises from 69 countries worldwide.

Furthermore, the university has participated in the European Institute of Innovation and Technology project INTREPID-HEI in the subproject Urban Mobility. To activate international grant activity, increase the number of university-wide or interdisciplinary international projects, and participate in hackathons, KNU has signed a contract with EBSCO Publishing. This contract grants exclusive rights and licenses for the reproduction, distribution, demonstration, public performance, and adaptation of the content of Methods and Objects of Chemical Analysis journal, among others.

1.6. Mobilizing support for protecting KNU students and promoting patriotism

In times of military conflict and imposition of martial law, students are deemed particularly vulnerable and require sustained support due to the specificities of educational organization and the transformed realities of everyday life. The primary domains of intervention with students in these contexts comprise the provision of psychological and emotional assistance. Also essential is training on the conduct regulations during martial law, including air raid protocols, management of explosive devices, first-aid medical interventions to save lives and prevent possible complications, and the support and adaptation of internally displaced students. Developing critical thinking and media literacy, fostering national and patriotic education, and promoting volunteer activities represent necessary interventions to help students cope with the adverse consequences of military operations and martial law.

To achieve the objectives mentioned above, KNU has implemented various measures. These measures include the intensification of efforts on the university's website and social media platforms, the opening of new pages and sections dedicated explicitly to military aggression, the creation of an English-language landing page on the official website of the EUniWell alliance of European universities, and the production of a series of videos entitled #KNUexperts. The university has also initiated the Virtual Memorial to the Memory of the Fallen Shevchenko Students projects and War for Ukraine's Independence: Events on the Fronts analytical reviews. Furthermore, KNU has been actively disseminating information about the activities of volunteers, philanthropists, and public activists who support the unity of the Ukrainian people in their fight against occupiers. Thematic literature reviews on military psychology and international sanctions as resistance to russian aggression from 2014 to 2022 have also been compiled. The university has collaborated with national media outlets, including United News Marathon, ICTV, and 1+1.

KNU has implemented numerous initiatives to develop students' professional skills, promote non-formal education, and foster national-patriotic values. The university has organized training programs on first aid, civil protection, and survival techniques during the occupation. In spring 2022, the Center for Social Development and the Campus and Youth Center served as a distribution hub for humanitarian aid to those impacted by the war. This aid was distributed to various groups, such as Military Institute personnel, students, employees who joined the Armed Forces, and internally displaced persons. KNU also held several charitable events, such as master classes on making trench candles, weaving camouflage nets, charity fairs, and volunteer trips to de-occupied territories in the Kyiv region.

Moreover, all KNU structural units conducted social and charitable events. They launched fundraising for territorial defense units and the Armed Forces of Ukraine, volunteer events to help animal shelters, blood donations, setting up shelters, cooking for cadets, and collecting and sending parcels with medicines for the military, among others. The

Veterans Council of KNU has been actively involved in volunteer efforts since the start of the full-scale aggression. The Council has transferred funds to the Armed Forces of Ukraine and provided warm clothes to refugee support centers. They also participated in the weaving of nets in the central Red Building and volunteer centers throughout Ukraine. Furthermore, KNU's Museum of History has begun collecting documents and materials about the ongoing aggression and the participation of university educators, students, and staff in the events of the ongoing war. They are also preparing materials to showcase the heroism of KNU students, staff, and alums who fought for their country's freedom and independence.

Financial challenges and strategies for KNU during wartime

Ensuring KNU's financial sustainability proved to be a formidable task, involving identifying financial income sources, rational allocation of resources, and austerity measures in times of war. Despite the budget remaining unchanged compared to the previous year, the university faced a 52% reduction in funding for scientific activities, particularly in basic research and priority research areas, contracts with customers, and provision of paid services on scientific topics. As a result of Ukraine's budget sequestration, fund-

ing for grants and projects was also suspended, as indicated in Table A2 (Appendix A). To overcome these obstacles, KNU embarked on a transformation to become an entrepreneurial university by fostering collaborations between the state, university, and businesses. This direction aims to diversify funding sources, commercialize scientific and technical developments, incentivize employees materially, promote entrepreneurial thinking amongst students, and address real-world business development issues. To achieve its objectives, the university has already taken concrete steps, such as creating a mechanism for the entrepreneurial university to operate, devising a model for its establishment, and assessing the availability of material and human resources.

The university plans to develop a technopark, establish startups and update applied research topics commissioned by companies. Diia.Business (n.d.) entrepreneur support center will also engage modern business leaders to train students and entrepreneurs and improve business education through MBA studies at KNU's School of Business. The university's strategic objectives are to transform it into the core of innovation clusters, establish a system for identifying and managing risks, and continuously monitor the labor market. These initiatives have allowed KNU to withstand the year with dignity and continue executing its strategic development plan.

CONCLUSION

This paper aims to present KNU's experience in maintaining its educational, scientific, and economic activities and exploring new development opportunities in the face of internal and external risks during times of war. The university has provided crucial psychological and emotional support to students and staff, prioritizing their well-being and productivity. The university's survival and preservation of human resources were accomplished by minimizing student losses, maintaining material and technical resources, and seeking new sources of financial support to cultivate a new generation of highly spiritual and patriotic youth. KNU relocated employees to safe places and provided academic mobility and moral incentives to maintain a stable number of lecturers. Student losses were minimized by implementing flexible student-centered forms of education and individual counseling. The university's internationalization efforts and strong relationships with foreign partners have resulted in numerous partnership agreements and grant initiatives, increasing inter-university projects and individual grants awarded to educators. Despite significant infrastructure losses, the university leveraged various state and private funding sources to restore and support it. Current KNU's strategy involves a shift towards an entrepreneurial model to diversify funding sources and promote entrepreneurial thinking. The university aims to become the core of innovation clusters, manage risks, and monitor the labor market. KNU's experience could provide valuable insights for other HEIs facing similar challenges, highlighting their crucial role in promoting national resilience and contributing to the development of society in times of war.

AUTHOR CONTRIBUTIONS

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REFERENCES

- Diia.Business. (n.d.). Diia.Business entrepreneur support center at Taras Shevchenko National University of Kyiv. Retrieved March 29, 2023, from https://business.diia.gov.ua/en/kyiv
- Duhnovski, Yu. (2020, January 18). Red Building of Taras
 Shevchenko National University of Kyiv [Facebook Page]. Facebook.
 Retrieved from https://m.facebook.com/Duhnovski/photos/a.8-05909183086140/1045357835807939/
- Euroosvita. (2022, June 6). Reitynh universytetiv Ukrainy "TOP-200 Ukraina 2022" [Rating of Ukrainian universities "TOP-200 Ukraine 2022"]. (In Ukrainian). Retrieved from http://www.euroosvita.net/index. php/?category=1&id=7420#
- Interfax Ukraine. (2023, January 2).
 Natsionalnyi universytet im. Tarasa
 Shevchenka otrymav znachni poshkodzhennia vid obstriliv ta zvertaietsia
 za dopomohoiu [Taras Shevchenko
 National University suffered significant
 shelling damage and is asking for help].
 (In Ukrainian). Retrieved from https://
 interfax.com.ua/news/general/882031.
 btml
- Lopatina, H., Tsybuliak, N., Popova, A., Bohdanov, I., & Suchikova, Ya. (2023). University without Walls: Experience of Berdyansk State Pedagogical University during the war. *Problems*

- and Perspectives in Management, 21(2-si), 4-14. http://dx.doi.org/10.21511/ppm.21(2-si).2023.02
- Patryliak, I. (2019, March 15). Kyivskyi universytet. Pershi kroky [Kyiv University. First steps]. Voice of Ukraine [Holos Ukrainy]. (In Ukrainian). Retrieved from http://www.golos.com. ua/article/314792
- QS. (2022, June 8). QS World University Rankings 2023: Top global universities. Retrieved from https://www.topuniversities.com/university-rankings/ world-university-rankings/2023
- 8. Springer Nature. (2022). 2022 tables:
 Institutions Academic. Ukraine.
 Nature index. Retrieved from https://
 www.nature.com/nature-index/annual-tables/2022/institution/academic/
 all/countries-Ukraine
- o. Taras Shevchenko National University of Kyiv (TSNUK). (2022a, September 29). "Bez yadra horikh nishcho, tak samo, yak i liudyna bez sertsia" (H. Skovoroda) ["A nut without a kernel is nothing, just like a person without a heart" (H. Skovoroda)]. [Facebook Page]. Facebook. (In Ukrainian). Retrieved from https://www.facebook.com/kyiv.university/photos/8364539776904564/
- Taras Shevchenko National University of Kyiv (TSNUK). (2022b). Zvit rektora Kyivskoho natsionalnoho universytetu

- imeni Tarasa Shevchenka 2021 [2021 Report of the Taras Shevchenko National University of Kyiv's Rector]. (In Ukrainian). Retrieved from https:// www.univ.kiev.ua/pdfs/zvit/zvit-rektora-2021.pdf
- Taras Shevchenko National University of Kyiv (TSNUK). (2022c, October 13). Shevchenkiv universytet prosyt pro pidtrymku [Shevchenko University is asking for support] [Facebook Page]. Facebook. (In Ukrainian). Retrieved from https://www.facebook.com/kyiv. university/photos/8432165713475303
- Taras Shevchenko National University of Kyiv (TSNUK). (2023a). Zvit rektora Kyivskoho natsionalnoho universytetu imeni Tarasa Shevchenka 2022 [2022 Report of the Taras Shevchenko National University of Kyiv's Rector]. (In Ukrainian). Retrieved from http:// www.univ.kiev.ua/pdfs/zvit/zvit-rektora-2022.pdf
- 13. Taras Shevchenko National University of Kyiv (TSNUK). (2023b, January 1). Kraina-teroryst rosiia prodovzhuie zavdavaty znachnykh udariv po tsyvilnykh, infrastrukturnykh ta kulturnykh obiektakh, namahaiuchys vydaty yikh za viiskovi [The terrorist country of russia has persisted in launching significant attacks on civilian infrastructure and cultural objects, falsely attempting to portray them as military targets] [Facebook Post]. Facebook. (In

- Ukrainian). Retrieved from https://www.facebook.com/kyiv.university/posts/8841982315826972
- Taras Shevchenko National University of Kyiv (TSNUK). (n.d.). History.
 Retrieved March 29, 2023, from http://knu.ua/en/geninf/history
- 15. The Verkhovna Rada of Ukraine. (2022). Pro vydilennia koshtiv z rezervnoho fondu derzhavnoho biudzhetu dlia vidnovlennia poshkodzhenykh obiektiv u m. Kyievi [On the allocation of funds from the state budget reserve fund for the restoration of damaged objects in Kyiv]. Decree
- No. 927-p. (In Ukrainian). Retrieved from https://zakon.rada.gov.ua/laws/show/927-2022-%D1%80#Text
- Times Higher Education. (2022).
 World University Rankings 2022. Retrieved from https://www.timeshighereducation.com/world-university-rankings/2022#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats
- 17. U.S. News. (n.d.). 2022–2023 best global universities in Europe. Ukraine.
 Retrieved March 29, 2023, from https://www.usnews.com/education/best-global-universities/europe
- Ukrainian Institute (UI). (n.d.). Postcards from Ukraine. Retrieved March 29, 2023, from https://ui.org.ua/en/ postcards-en/
- 19. Ukrainian Union of Marketing Experts. (2023, March 25). Opytuvannia: Diialnist universytetiv v umovakh viiskovoho stanu (kviten-traven 2022 r.) [Survey: HEI activities in conditions of martial law (April-May 2022)]. (In Ukrainian). Retrieved from https://omu.marketing/opytuvannya-diyalnist-universytetivv-umovah-vijskovogo-stanu-kvitentraven-2022-r/

APPENDIX A

Table A1. War impacts on the educational sphere in Ukraine

Source: Own elaboration.

Factor group	Factor description	Impact
Political	Intensification of military operations on the territory of Ukraine	Displacement of students, destruction of educational infrastructure and property
	Unwillingness of the aggressor government to take diplomatic steps	Inability to resolve the conflict peacefully
	Broad support of Ukraine by most countries worldwide	Financial assistance to HEIs, preferential conditions for temporarily displaced students
	Heroic defense of the Armed Forces of Ukraine	Increased sense of patriotism and national unity among students
ente Des and Economic Dec Reo don Dive	Destruction and closure of most strategic enterprises	Loss of jobs for educators and staff, reduction in state funding for education
	Destruction of a significant part of energy, military, and transportation infrastructure	Disruption of the educational system, hindrance to educational transportation and communication
	Decline in living standards	Reduced access to educational resources for lower-income families
	Reorientation of the Ukrainian economy towards the domestic market	Increased opportunities for local businesses to contribute to the educational sector
	Diversification of economic ties with non-russian countries	Expansion of international student exchange programs, increased availability of foreign scholarships
Social	Reduction in the number of school graduates	Hindrance to the HEIs' development
	National identity and pride	Promotion of Ukrainian culture and history in the curriculum, increased cultural awareness among students
Environmental	Catastrophic deterioration of the ecological situation	Negative impact on public health and well-being, reduction in the quality of life for students and staff
Scientific	Reduction in funding for science and scientific and technical developments	Reduction in research and innovation in the educational sector, loss of scientific talent among educators and students

Table A2. KNU's partial funding structure, in UAH million¹

Source: TSNUK (2022b, 2023a).

Indicator 1. Funding for all budget programs, including:		2022 2725.46
by the special fund (KNU financial assets)	843.89	868.57
2. Personnel training	1328. 0	1458.5
3. Academic scholarships	114.8	208.5
4. Social scholarships	20.4	23.7
5. Scientific and research activities	84.6	75.2
6. Support for priority areas of scientific research ²	8.7	4.2
7. Current repairs in dormitories ³	2.1	
8. Current repairs in buildings ³	3.1	9.7
9. Capital repairs in dormitories	4.8	2.3
10. Capital repairs in buildings		-
11. Charitable aid for rocket-damaged building restoration		1.8
12. Financing from the Ukrainian's budget reserve fund for rocket–damaged building restoration		15.0
13. Revenues from the special fund ²		761.0
14. Charitable aid for KNU structural units		2.6
15. Purchases of computer equipment	11.3	-

Note: ¹1 euro = 40 UAH as of March 30, 2023. ² Data covers 11 months. ³ Special fund money.